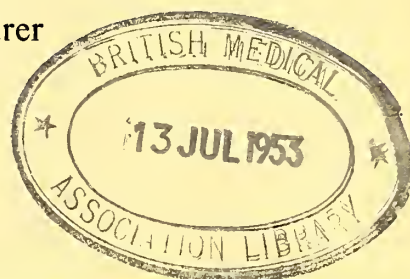


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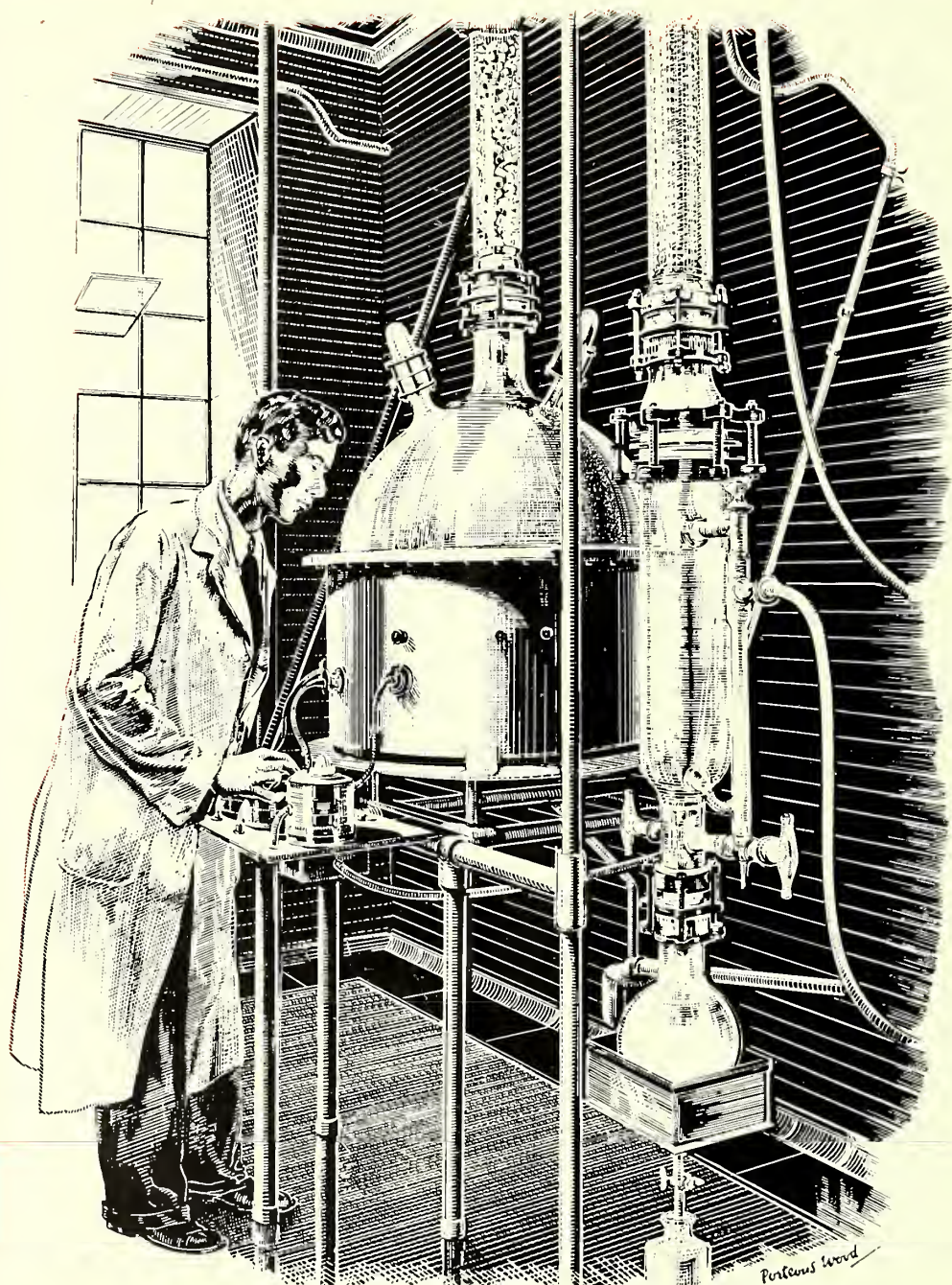
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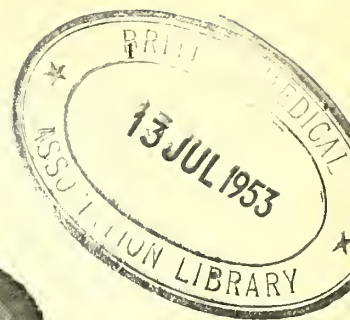
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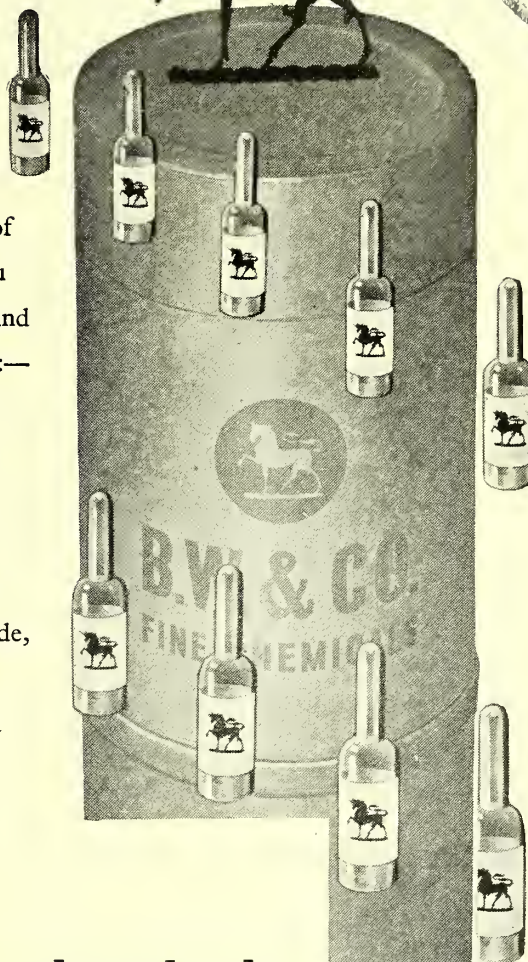


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DETTOL submit
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Wide mention in medical literature has made Dettol a text-book antiseptic. Wide clinical use has attested the efficiency of Dettol in literally millions of cases which range from minor accident to major operation.

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Bacteriological data and the literature of Dettol are available on request. Dettol is packed in 2 and 5 gallon, Purchase Tax free Dispensing containers.

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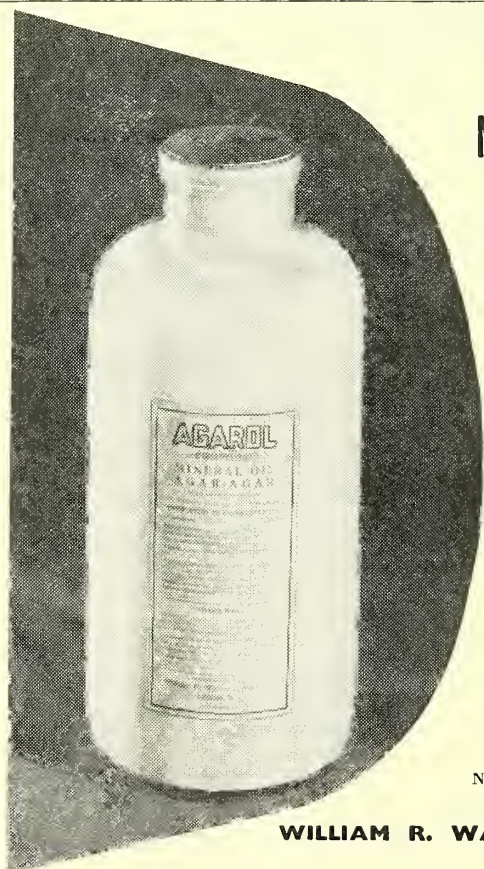
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for extra economy when supplied
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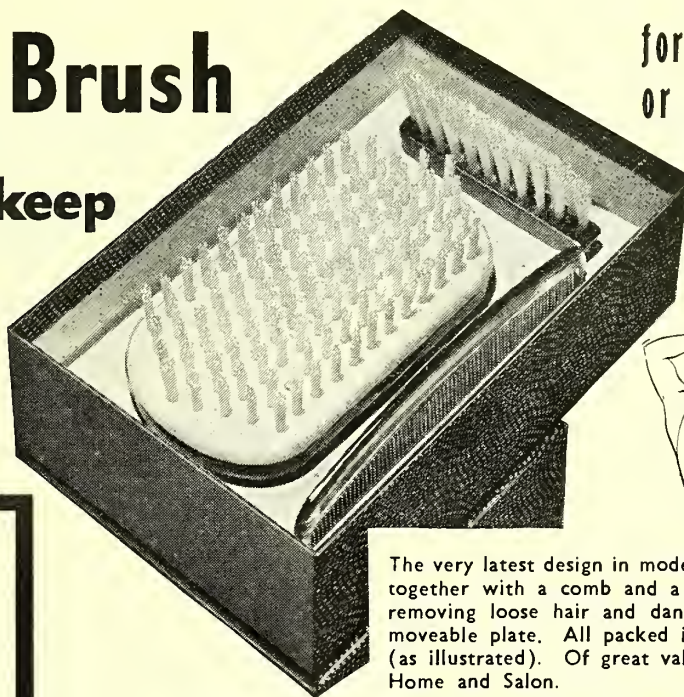
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FOUR-IN-ONE SERIES

Specially prepared for dealing with drab or
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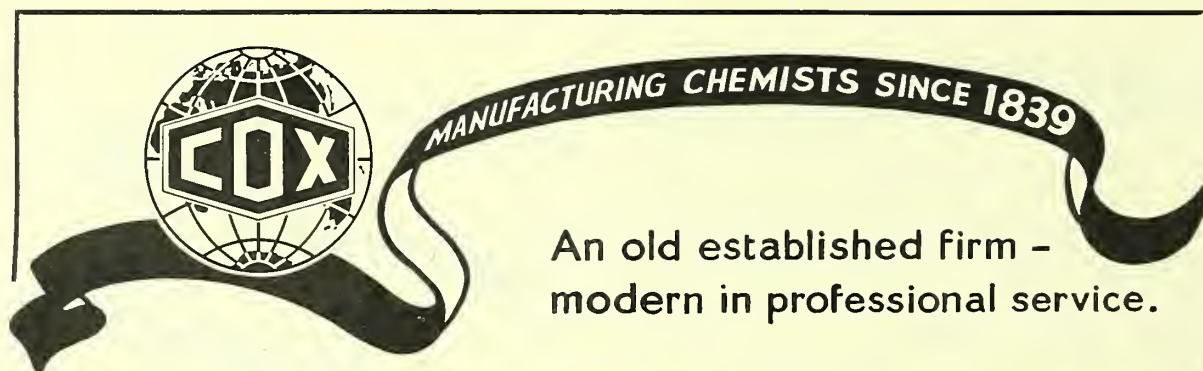
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The cartons are in these colours:
blue for cotton wool; green for
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- ★ *Smart modern packs*
- ★ *Neater and more dignified*
- ★ *Only a little extra cost*

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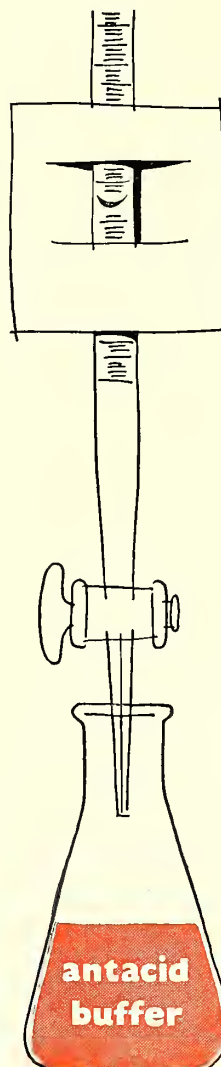
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A new and improved quality



For over ten years 'CETAVLON' has been known to pharmacists and doctors for its useful cleansing and bactericidal properties. Recent developments in manufacture have now resulted in the production of a new higher grade 'Cetavlon' enhanced in purity and potency. Furthermore, by achieving a correct balance of long chain alcohols used as starting materials it has been found possible to increase the solubility in water and hence facilitate the preparation of stock solutions.

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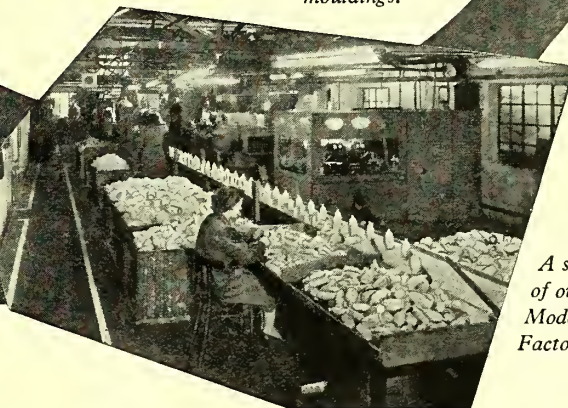
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tastes like a sweet

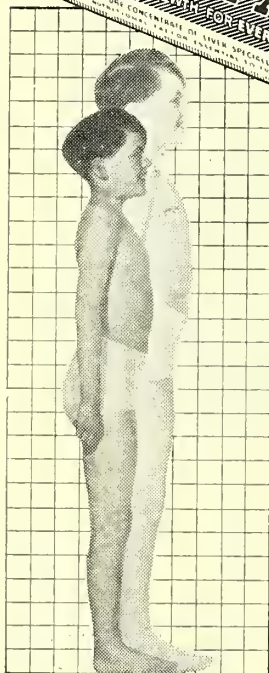
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BENEFAX improves children's GROWTH, HEALTH & ENERGY

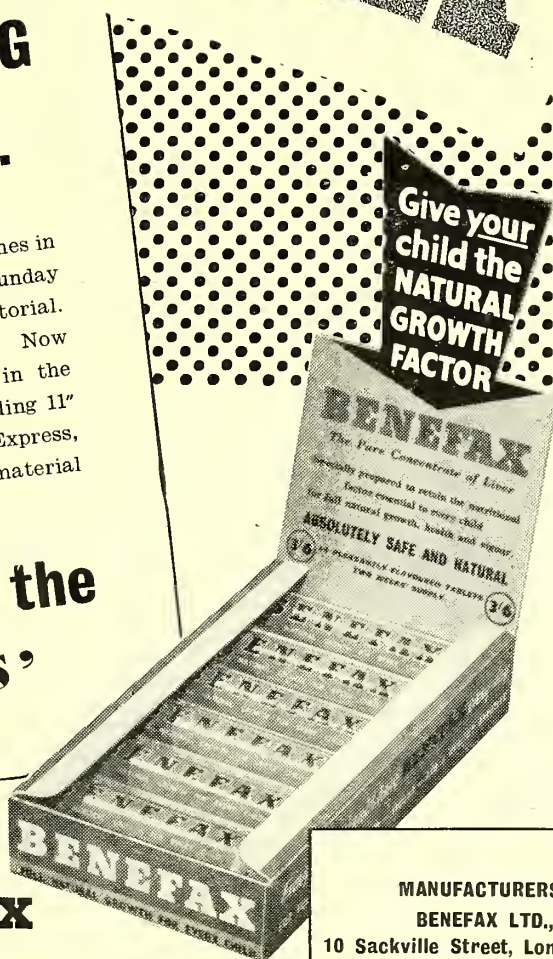


n BENEFAX

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"The series consists of

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74 „ „ duodenal ulcer

. . . of the 100 cases, 94 were completely symptom free within one month.

ANALYSIS OF RESULTS

N.B. The follow-up period of every case is at least twelve months.

Type	Number of cases	Became symptom-free during			Total symptom-free within one month	Operated	Recurrence of Symptoms		
		1st week	2nd week	3rd & 4th weeks			Mild indigestion radiologically neg.	Severe indigestion radiologically pos.	Operation required for recurrence
Gastric	26	17	2	5	24	2	—	0	0
Duodenal	74	48	19	3	70	4	—	1	1
Total	100	65	21	8	94	6	20	1	1

"It will be noted . . . that there was only one severe recurrence of indigestion."

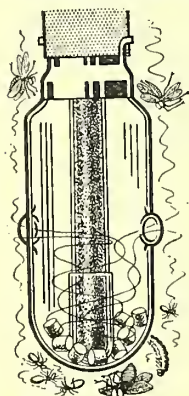
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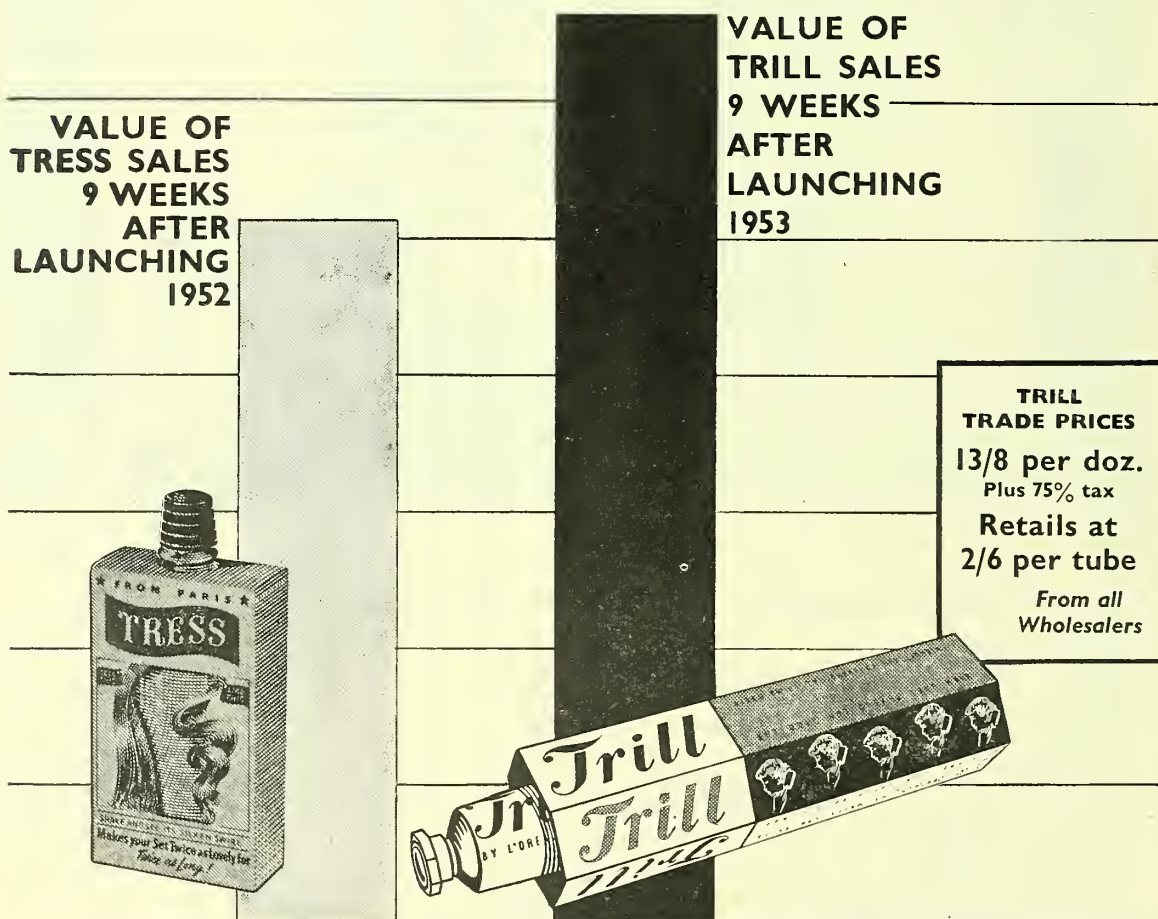
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Members of the profession and students are cordially invited to this exhibition which is open daily (except Saturday and Sunday) from 10 a.m. to 5 p.m.

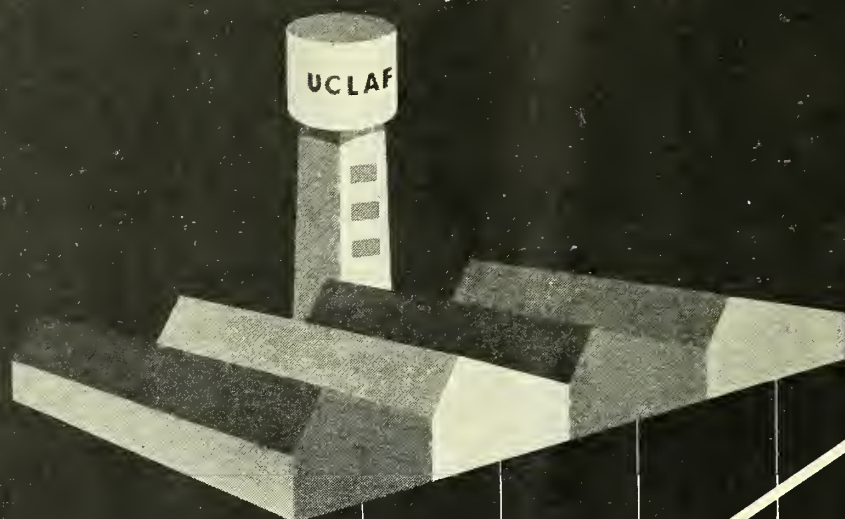
Visitors will also wish to see the two exhibitions at The Wellcome Historical Medical Museum, 28, Portman Square, W.1; "Medicine under Three Queens: Elizabeth I, Anne, Victoria," and "The Medicine of Aboriginal Peoples in the British Commonwealth." They are open from 10 a.m. to 5 p.m. daily (except Sunday).



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Official organ of the Pharmaceutical Society of Ireland
and the Pharmaceutical Society of Northern Ireland

Volume 160

July 11, 1953

No. 3829

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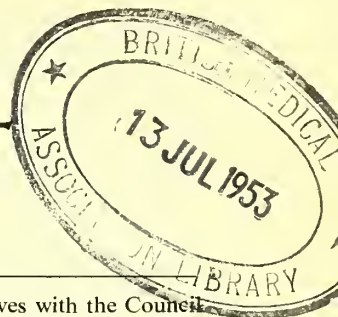
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The CHEMIST AND DRUGGIST

Volume 160

JULY 11, 1953

No. 3829



Progress in Cancer Research PROMISE OF CHEMICAL CONTROL

AN "increasingly strong belief" that effective control of cancer would be ultimately achieved by purely chemical means was referred to by PROFESSOR A. HADDOW (director of the Chester Beatty Research Institute) in an address to the annual meeting of the British Empire Cancer Campaign in London on July 7.

While much remained to be done he predicted that sooner or later research workers would evolve something entirely new in the chemotherapy of cancer—a kind of substitution therapy by which the cancer cell would be controlled from without, by the same kind of chemical means in virtue of which the normal cell automatically regulated itself from within.

Knowledge had been accumulated of some hundreds of pure chemical agents of different types which were all endowed with a remarkable capacity to cause cancer. Until recent years little or nothing was known either of their mode of action or even of the site within the cell at which it took place. Later there had developed a great shift of emphasis and increased attention had been given to the detailed biochemical mechanism of action, in the confident belief that full understanding of "this remarkable process by which normal cells were converted and transformed into cancer cells" would lead to discovery of the means by which the process might be regulated, controlled, or even prevented or reversed. In the case of certain cancer cells research workers recognised for the first time the imprint left upon them by the chemical agents which induced their appearance. The field of interest was now being extended to include the giant molecules within the cell with which it was believed they combined. That was leading to studies of the colloidal and molecular organisation of the chromosomes and of their constituent fibrous molecules. The chromosomes and their component molecules were filaments with the almost magical quality of reproducing their like, and it was that process which it was believed might be interrupted by the cancer-producing agent. Workers were still not finally sure, but it appeared that the cancer cell was derived from the normal cell through the loss of ferment systems normally responsible for growth regulations. However, no explanation could be complete that failed to take count of all available facts, including the existence of tumour viruses.

Research workers could not penetrate the future, but the prospects had sen-

sibly changed and cancer prevention, which some years ago seemed utterly beyond their hopes, might yet prove to be within their ultimate powers.

TRIBUTE TO SIR HUGH Guest of Society's Council

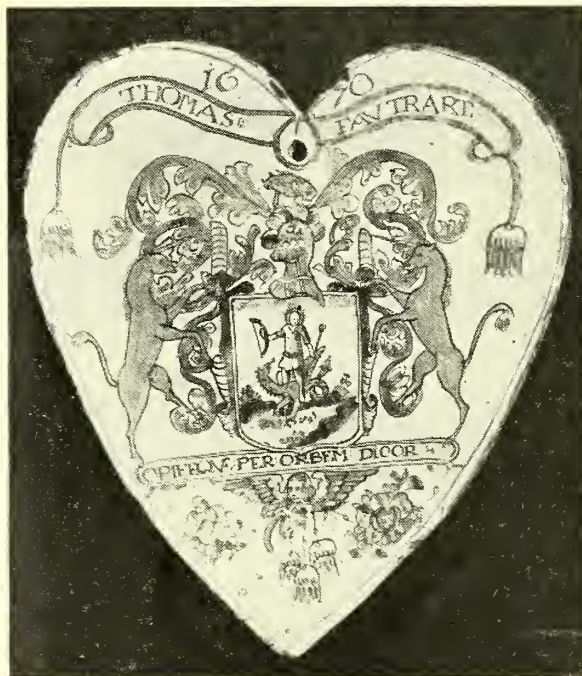
AFTER being knighted by the Queen, on June 30, Sir Hugh Linstead, (a secretary of the Pharmaceutical Society) and Lady Linstead were given a warm welcome at the monthly dinner of the Society's Council held in London. Proposing their health, Mr. C. W. MAPLETHORPE said that he first recognised Sir Hugh's ability when they were students at the Square together and Sir Hugh, as senior Bell scholar, proposed the health of the Society at a School dinner. They all realised then that there was a considerable future for a young man who could speak so fluently in the presence of his elders. Through the years, pharmacy had progressively occupied a more important position because of the influence Sir Hugh had been able to bring to bear. Since he went into Parliament in 1942, he had served his Party with distinction and he had been of the greatest service to pharmacy in the House down to the way in which he had organised the passage of the Pharmacy Act in 1952. SIR HUGH LINSTAD, in reply, said that neither he, who was the son of a pharmacist nor his wife, whose father and mother were both pharmacists, could have asked for a better ending to a remarkable day than that they

should find themselves with the Council of the Society. First among those to whom this honour of his was due was his wife who had had to put up with a great deal of loneliness. She had made his job possible. Next came the patience and understanding of Mr. F. W. Adams, who had had to carry a very heavy burden, and the Council and the Society who had liberated him to do this job for pharmacy. It would be his job to give back to pharmacy something of that which pharmacy had given to him. LADY LINSTAD also thanked the Council for their reception of the toast.

IMPORTS OF AGAR

Application for licences invited

THE Board of Trade invite applications for licences permitting the import during the year July 1 to June 30, 1954, of agar of Japanese or Southern Korean origin consigned from Japan, Southern Korea or Hong Kong. Licences will be issued to those who imported in the year 1952 and to those manufacturers who used agar in the course of that year. All applications accompanied by certified statements should be sent to reach the Board of Trade, Import Licensing Branch, 43 Marsham Street, London, S.W.1, not later than July 25.



Rare Lambeth tile bought by the Pharmaceutical Society (see *C. & D.*, June 20, p. 659). It is blue and yellow and bears the arms of the Apothecaries' Company and the name of the original owner "Thomas Fautrart 1670."

N.H.S. ANNIVERSARY

Minister sends birthday message

TO mark the fifth anniversary of the National Health Service (which started on July 5, 1948) the Minister of Health (Mr. Iain Macleod) has sent a message to the chairmen of the various authorities connected with the scheme including: Regional Hospital Boards; Boards of Governors of Teaching Hospitals; Hospital Management Committees; Local Health Authorities; and Executive Councils; Medical Practices Committee, Joint Pricing Committee, and Welsh Joint Pricing Committee. "Of what has been achieved we can all be proud," he says "for there can be no doubt that the Service has already been of the greatest benefit to many millions of people and that, building on the sound foundations already laid, we can look forward to further success in promoting the health of the nation." He pays a tribute to the work of contractors. Number of prescriptions dispensed by chemists during the five years is 1,062,000,000.

A message thanking all of those who have taken part in the Service in Scotland was sent to chairmen of Scottish authorities in the Service by the Secretary of State for Scotland (Mr. James Stuart). Details sent in the letter show that the total number of prescriptions dispensed by chemists, July 1948 to July 1953 in Scotland is 95,000,000, and that the number of chemist contractors in the N.H.S., mid-July 1953, is 1,975.

AROMATIC COMPOUNDS

Association's annual meeting

AT the annual meeting of the British Aromatic Compound Manufacturers' Association held in London recently, the report by the chairman (Mr. R. F. Gillham) dealt, among other matters, with the Brussels Common Tariff Nomenclature. The Association was represented on a joint committee set up to advise the Board of Trade on that part of the nomenclature dealing with essential oils, aromatics, essences, perfumery and toilet preparations. The committee had made a number of suggestions which had been welcomed by the Board of Trade. It was understood that the revised tariff headings would not, however, be brought into force until 1954 at the earliest. The report also gave details of the efforts of the Association to increase the export of aromatics and of getting these products included wherever possible in the various bilateral trade agreements.

After the report and accounts had been unanimously adopted, Mr. Gillham vacated the chair. Messrs. J. A. Pentecost and L. L. Hitchen were unanimously elected *Chairman* and *Vice-chairman* respectively for the ensuing year and the *Committee* was appointed as follows: Messrs. C. F. Bush, R. F. Gillham, S. R. Mansfield, W. Naumann, and A. J. Plastow. The meeting was sorry that Mr. S. R. Mansfield (retiring vice-chairman) had not felt able to accept nomination for the chair owing to his other commitments and to the recent loss of his wife. It was agreed that a message of

sympathy in his bereavement should be sent to him.

Members later discussed the export of aromatics to South American countries, the essential oils import licensing scheme, and a suggestion that standard types of sizes and packaging might be considered for adoption by the trade.

HISTORY EXHIBITION

Organised by Society's Museum

THE museum department of the Pharmaceutical Society is arranging an exhibition on "Aspects of Pharmaceutical History in Relation to Medicine" in the main entrance hall of the University College of South Wales and Monmouthshire, Cardiff, July 14-17 (9 a.m. to 6 p.m.), in conjunction with the annual meeting of the British Medical Association. Pharmacists are invited to visit the exhibition.

POLIOMYELITIS

Two fatalities

SEVEN cases of poliomyelitis were confirmed at Chelmsford, Essex, recently. Of those, two (a man aged thirty-three and a girl aged ten) were fatal. The total number of confirmed cases of poliomyelitis in England and Wales in 1953 to June 27 is 891.

LOCAL NEWS

Cameras Stolen

USING a duplicate key, thieves entered the pharmacy of Mr. W. H. Green, M.P.S., 49 Hertford Street, Coventry, recently, and stole cameras valued at more than £800. Only the most expensive equipment, including one camera worth £266, was taken.

New Pharmacy Act Address

A MEETING of the Aberdeen and North-eastern Scottish Branch of the Pharmaceutical Society was held in Aberdeen, on June 18. Dr. G. H. MacMorran (assistant resident secretary, Scottish Department) addressed the meeting on "The New Pharmacy Act." He also gave an account of the laboratories which were opened recently at York Place, Edinburgh

(C. & D., June 6, p. 589). Reports were given by delegates to the Branch Representatives' meetings recently held in London and Edinburgh.

Coronation Ball at Reading

AMERICAN visitors from Reading, Pennsylvania, U.S.A., attended the pharmaceutical Coronation ball held at Reading town hall recently. They were accompanied by the mayor and the deputy mayor and the president and the secretary of the Reading Chamber of Commerce. The mayor proposed the toast to the Royal Patron of the Pharmaceutical Society and Mr. Roger Jewett (secretary of the Reading and Berks county Chamber of Commerce, Pennsylvania) thanked the people of Reading and the local branch of the Pharmaceutical Society for their hospitality. During the evening Councillor G. G. Hammond presented the branch with a newly inscribed chain of office. The retiring chairman (Mr. H. C. Pacey) accepted the gift on behalf of the branch and invested the newly elected chairman (Mr. H. D. Fitch). The chain is inscribed with the names and years of office of the twenty three past chairmen of the branch, together with a clasp bearing the inscription "Presented to the Reading and District Branch to commemorate the Coronation of Queen Elizabeth II." Miss Reading, 1953, presented the spot prizes during the ball.

IRISH NEWS

Medical Exhibition

MANY Irish, British and European pharmaceutical manufacturers had stands at a medical exhibition held in conjunction with the Irish Medical Association's 1953 annual conference at Waterford, July 1-4.

Customs Scrutiny Abolished

THE Revenue Commissioners in Dublin have abolished all customs examinations of baggage carried by passengers travelling from the Irish Republic to Great Britain or Northern Ireland, and passengers are free to take any goods with the exception of those ex-



ULSTER AND SCOTTISH CHEMISTS' BOWLERS AT LARNE.—Members of the Ulster and Scottish Chemists' Bowling Associations after their match in Northern Ireland, on June 24 (see C. & D., July 4, p. 3). Second row, L. to R.: Messrs. R. A. Johnston, G. Hamilton (U.C.), A. McKinlay (secretary, S.C.), John L. Thompson (captain, S.C.), J. Caldwell (captain U.C.), William Peebles (S.C.), H. McRoberts (vice-captain, U.C.), V. P. Richards (S.C.), T. Ross, S. McGowan (U.C.).

pressly prohibited by enactment, which include Dangerous Drugs, firearms and gold. The baggage of incoming passengers is still subject to examination.

Examination Results

THE following obtained passes in the Qualifying examination of the Pharmaceutical Society of Northern Ireland:—

Robert Desmond Abernethy, Malcolm Hugh Bailey, Henry Beirne, Edwin William Best, Margaret Anne Best, John Gordon Blair, Thomas Bogues, Albert Samuel Carson, George William Ewart Dennison, Patrick Joseph Donnelly, Mary Theresa Duffy, John Crawford Dundee, Ann Carmel Hayes, Nancy Shiels Lytle, Denis McAlinden, Alexander Duncan McBride, Anna May McCoubrey, Norman McCullough, William Anthony McElhinney, John McElreavey, Ivan Donald McKee, Mary Elizabeth MacVeigh, William Robert Meighan, Gerald Anthony O'Boyle, Mary Bridget Johanna O'Neill, Philip Ignatius O'Reilly, Irvine Robinson, John Morris Smyth, James Henry White, Anna Irene Wilson, David James Trevor Wilson, Peter Wilson.

NEWS IN BRIEF

Royal Show Success.—A white bull, Erimus Ghost, from the Brechin herd of Boots Pure Drug Co., Ltd., won the championship in the shorthorn class at the Royal Agricultural Society's show that opened in Blackpool on July 7.

Fire at African Factory.—A serious fire broke out recently at the factory of Allen & Hanburys (Africa), Ltd., Congella. Messrs. C. W. Maplethorpe (chairman of the company) and W. M. Clayson (vice-chairman) left London immediately by air to ascertain the damage.

Key Industry Duty Exemptions.—Under an Order published as S.I., 1953, No. 1046, the Treasury has added the following chemicals to the list of exemptions from Key Industry Duty for the period July 9-August 18:—*n*-Amyl alcohol of purity not less than 98 per cent., 1-naphthol, pentaerythritol, potassium cyanate, sodium methoxide.

SPORT

Golf.—THE IRISH CHEMISTS' GOLF SOCIETY were the guests of the ULSTER CHEMISTS' GOLFING ASSOCIATION at co. Louth Golf Club on June 24 and were the winners of the annual competition. Prizes for the best individual cards were won by D. Moncrieff (68) and P. Foley, T. J. Lynch and J. McCay (69). Mr. G. McAuley presented the prizes on behalf of the British Drug Houses. The I.C.G.S. captain was W. F. Keys and U.C.G.A. H. McCracken.

EDINBURGH CHEMISTS' GOLF CLUB.—Outing over Baberton: Captain's prize, H. Semple (3) 71; No. 1 Section, W. L. Thomson (5) 74; No. 2 Section, A. Dinwoodie (15) 73; No. 3 Section, W. J. McRitchie (24) 74; Best Scratch, H. Semple, 74.

Bowls.—At the conclusion of the match between the ULSTER CHEMISTS' BOWLING ASSOCIATION and the SCOTTISH CHEMISTS' BOWLING ASSOCIATION at Larne, Northern Ireland, on June 24 (C. & D., July 4, p. 3), Mr. W. Peebles on behalf of the Scottish association presented the Ulster captain, Mr. J. Caldwell, with a painted plaque in full colour of the U.C.A. badge, in appreciation of his work in arranging the visit. A rink prize of Irish linen was presented to the Edinburgh rink by Thomas McMullan & Co., Ltd., Belfast.

TOPICAL REFLECTIONS

By Xrayser

Phytopharmacy

Dr. Henri Foussard's article "Veterinary Pharmacy and Phytopharmacy" (pp. 15-16) is of absorbing interest. About a year ago you published an account, by another distinguished *pharmacien*, of work on this subject in progress in France and of the course of study for a certificate issued by the Paris Faculty of Pharmacy. Writing from a different angle, Dr. Foussard shows that much of the routine work of testing samples of water, soil, milk and so forth is within the competence of a well-trained pharmacist. Problems of dealing in veterinary products in France and the United Kingdom are similar, and I need not make any further reference to your contributor's remarks on that matter. As to phytopharmacy, it may be noted at the outset that a better name for the science is desirable. Dr. Foussard cites the late Professor Perrot as objecting to the term on the ground that it "would lead to confusion with that of phytotherapy." I may add that it is open to the further objection of looking like a department of pharmacognosy. Professor Perrot suggested as preferable the name phytosanitary pharmacy. With due respect to the memory of so eminent a botanist, I hold that a title with nine syllables (eight in French) is too long. A word of not more than four syllables, and having a specific meaning, is wanted. At present I can think of only phytophylaxis (plant guarding) or phytomachy (plant fight).

A Systematic Campaign

Dr. Foussard makes his points effectively. He shows that careless handling of toxic materials by agricultural workers can lead to serious cases of poisoning, as when lead arsenate was found in well water. In 1936, French pharmacists formed the Professional Association of Phytopharmacy (A.P.P.), and were influential in starting courses on the subject in eight faculties and three schools of pharmacy. The preparation in France of baits containing strychnine or zinc phosphate is already confined by law to pharmacists; and an extension of this restriction to other poisons is expected. The fact that many French pharmacists have an analytical laboratory in their establishment renders easier the carrying out of "certain easy and simple analyses": pH estimations, lime requirements of soils, water analysis, estimation of fats in milk and bacteriological examination of pus are mentioned. Besides receiving a fee for each examination of this kind, "the profession could not but gain in prestige," and rural customers are likely to obtain supplies of "phytosanitary" and other goods from shops where knowledgeable testing is available.

Two Scottish Colleges

To find a favourable mention of technical colleges in an official report published by H.M. Stationery Office is a pleasant experience. As you note on p. 14, the latest annual report of the Scottish Education Department contains a tribute to the devotion and skill of teachers and the earnestness of students in the Heriot-Watt College, Edinburgh, and the Royal Technical College, Glasgow. As you have recently described the Heriot-Watt College (C. & D., 1952, II. 149-51), I need not dwell on its history: the Government report assigns its beginning to the year 1821. The Royal Technical College, Glasgow, dates back further—somewhat further, in fact, than the report acknowledges. It was evolved from the Andersonian University, founded by John Anderson in 1795. The founder died in January 1796: his library, apparatus and other things of value were bequeathed to the institution, and in the following June the trustees were granted a charter. In 1800, Thomas Garnett, professor of what was then called natural philosophy, went to live in London; he was succeeded by George Birkbeck, and four years later Birkbeck was followed by Alexander Ure. Among well-known names associated with the Andersonian are those of David Livingstone and Sir Edward Thorpe. In 1889 the medical section of the then College was removed; and in 1903 the foundation-stone of the present building was laid by King Edward VII.

NEW ZEALAND NOTES

By ERIC DASH

THE Chemists' Service Guild of New Zealand has presented its twenty-first annual report. The Guild, an incorporated society, has taken over the old Employers' Association and has grown to its majority over a very unsettled period. The value of concerted action has been appreciated, and though the group is voluntary, membership stands at 653 out of a total of 677 licences. Ten years ago half the chemists did less than £2,500 worth of business, but today only one in every eight does less than £5,000 worth. The number of people working in pharmacy is 2,500. Five years ago 60 per cent. of the pharmacies were individually owned. Now scarcely half of them are, in spite of the increased application for suburban licences by young pharmacists. Young pharmacists are being taken into shareholding partnerships in limited companies. That appears to be the best method of continuing professional ownership on a scale in keeping with the demands of scattered communities in New Zealand.

Effects of Social Security

Social Security has been the dominating influence during the latter half of the Guild's twenty-one years. From two million prescriptions at 2s. 6d. each, the country's "intake" has increased to eight million at more than 6s. each. Dispensing, however, stays level at about a third of total turnover. That is a deceptive figure when profits are considered because there is a much heavier wage cost in the dispensing department and overheads have been trebled over the past ten years.

The Guild has assumed much more real power over the past five years as it has taken over centralised pricing both in retail selling and in negotiating for dispensing rates with the Government. Following world trends, price control has slackened lately. With increased national advertising, control by chemists' groups is inclined to weaken, though there is a growing tendency for master agents and manufacturers to consult the Guild executive in arriving at prices of chemists' goods. An advisory committee with the Government has been re-established, mainly by Guild effort.

Container Prices

The price of containers for medicine, a continual bane during negotiation of prescription prices, has now been averaged. Previously containers for repeats of medicine were not paid for by the State, but now 4d. has been agreed upon for every item. Those whose major dispensing is of tablets in pill cartons will benefit, and those who deal mainly in prescriptions of large liquid bulk will suffer. The move is experimental and must prove popular in pricing offices at least. We do not suffer the long wait for payment for dispensing that troubles British chemists. Though times vary in each of four pricing offices, we are usually paid within a month or six weeks.

The number of apprentices entering pharmacy has levelled off. Higher wages and breaks for military service may discourage master chemists, especially those who only employ one person. It is to be hoped that no prolonged falling off in numbers occurs because population in New Zealand is increasing by almost a thousand a week and one chemist for each three thousand is needed.

Our major problem remains — the lifting of education to university level. The Minister of Health has agreed that improvement is needed and has suggested that the Pharmacy Board should approach the University senate. At present the detailed report of that body is being prepared. Because of present university commitments, lack of money may well cause delay.

A.P.C. tablets have been the subject of litigation in the Courts since 1948.

The Pharmacy Board has been upheld by two Courts of Appeal in its contention that their sale should be confined to chemists. Though leave was granted to the wholesalers concerned to take the case to Privy Council in 1952, no move in that direction appears to have been made. Instead, an endeavour has been made to have the Pharmacy Act amended so that decisions of the Appeal Courts would, in effect, be by-passed. Though the A.P.C. case is our local fight, the president of the Pharmacy Board found, when he represented New Zealand chemists at the centennial convention of the American Pharmaceutical Association in 1952, that interest in the matter was almost world wide. We feel that a principle—the selling of drugs by chemists—is at stake and New Zealand pharmacists through their organisations are doing their best to uphold it.

DEVELOPMENTS IN THE UNITED STATES

THE development of a new form of enzyme therapy in which a mixture of trypsin and desoxyribonuclease is inhaled as a chemical fog to help clear debris from diseased lungs was reported at a meeting of the American Association for Thoracic Surgery in San Francisco, California, recently, by Dr. Seymour M. Farber, San Francisco. The treatment, however, caused undesirable side effects in two-thirds of the cases.

Recently announced developments in the chemistry of steroid hormones include the synthesis by workers at the Squibb Institute for Medical Research, New Brunswick, New Jersey, of halogen-derivatives, of cortisone and hydrocortisone, that are up to four times as active as the parent hormones.

A new method of introducing an oxygen atom into the C-11 position of steroids which are then suitable for conversion into cortisone and other similar biologically active compounds has been devised by five chemists of Chas. Pfizer & Co., Brooklyn, New York. The starting material is ergosterol.

Pentylentetrazol when combined with barbiturate compounds has been found by workers of the Department of Pharmacology, Georgetown University School of Medicine, and Gallinger Municipal Hospital, to reduce the hazard potential of the barbiturates while retaining their therapeutic effect. Preparations of such a combination are being marketed by Strong Cobb Co., Cleveland, Ohio.

Using radioactive tracer techniques, a team of five Columbia University, New York, workers, under the leadership of Professor Charles Glen King, has demonstrated that vitamin C regulates the rate of formation of cholesterol in the animal body. Commenting on the implications of the discovery, Professor King said: "Our work shows that a deficiency of vitamin C results in complex fat formation in the test animal getting out of balance. The discovery opens a new approach to re-

search on normal fat and fat-like hormone metabolism, and also on arteriosclerosis and associated diseases."

To speed up the process of determining the total water content in biological tissues and other materials, a method based on the spectroscopic measurement of the ratio of ordinary water to heavy water in the sample has been devised by workers at the American National Bureau of Standards. The method has been applied successfully to determining the water of hydration of inorganic crystals and proteins, the water content of the human body and of bacterial cells, and has also been used in studies of water exchange in resins and of water transport through human capillaries, determination of moisture in the atmosphere, and the identification of unknown organic molecules.

The Freeport Sulphur Co. has started mining sulphur from deep beneath Bay St. Elaine in the Louisiana marshlands using a floating mining plant, the only one of its kind in the world. Superheated sea water is injected into the salt dome's caprock beneath the bay to melt the sulphur for extraction.

Chemists at the U.S. Department of Agriculture's Southern Regional Research Laboratory, New Orleans, Louisiana, have obtained a hard wax from crude rice-bran oil. Although the wax is not quite so high melting or as hard as carnauba, it has physical properties that should give it a commercial value the chief of the Department's Bureau of Agricultural and Industrial Chemistry states.

A new synthetic soil conditioner that helps to control rain and wind erosion on construction sites, etc., has been developed by the organic chemicals division of the Monsanto Chemical Co. The new product, to be sold under the name Bondite soil conditioner, is designed to stabilise aggregates on the soil surface to hold the seed and soil in place until vegetative cover crops have time to germinate and become established.

MERCHANDISE MARKS BILL

INTRODUCING the second reading of the Merchandise Marks Bill in the House of Commons on June 26, Mr. PETER THORNEYCROFT (President of the Board of Trade) described the Bill as small but useful. It was designed to extend the provisions of law that protect the public against false and misleading trade descriptions of goods. The vast majority of traders would, of course, be unaffected by the Bill because they described their goods in "honest, temperate and moderate terms," indeed, they would welcome the Bill in so far as it prevented unscrupulous traders from competing unfairly with them. It would not and could not protect the unwary purchaser against all the wiles of an unscrupulous seller.

New Features

Continuing, he said: Clause I brings in certain new characteristics, such as quality, fitness for purpose, strength, accuracy, performance, or behaviour of any goods. The Bill does not make the ordinary "trade puff" an offence, and it specifically exempts existing trade marks, even though these have in them a descriptive element. By that I mean such things as "Kilpain" tablets for headaches. The Bill does not catch traders with stocks of goods subject to trade descriptions, which they cannot clear.

MR. RICHARD LAW said that an over zealous medical officer of health caused an action to be brought against a concern which makes a syrup of figs. The case was dismissed, but he had been assured that the costs of the action to the firm were far in excess of the costs granted. "There seems to be a very great possibility in cases of this kind that a too enthusiastic, too legalistically minded local authority may bring actions against manufacturers and traders in perfectly harmless products," he added.

DR. BARNETT STROSS, seconding an amendment, said the Bill gave no protection to manufacturers against the unscrupulous use of British trade marks, patents or designs by competitors who may export to the Dominions, the Commonwealth or the Colonies.

He indicated that in the House of Lords it was thought that the term "Veno's Lightning cough cure," "being time-honoured by custom, would still pass under this Bill when it becomes an Act." "I am sorry about that," he continued. "I do not think that a preparation would lose anything in its sales if it called itself only 'Veno's cough cure' and left out the word 'Lightning,' which is intended to imply that as fast as a stroke of lightning anyone who takes some of this preparation will cure his cough."

"Sometimes advertisements use techniques which are most undesirable—namely, the technique of urging or imposing upon the citizen who reads the advertisement the fear of being a social outcast. I am sure the Parliamentary Secretary agrees that in the basis of 'plugging' things like deodorants and chlorophyll tooth-pastes, the technique that is used is to make particularly young people and women frightened that they will become social outcasts

and that their armpits and their mouths are objectionable. It is a form of childish black magic and we ought not to allow people to have it imposed upon them, particularly when what is said is not even true. Everybody associated with medicine or science knows that chlorophyll does not take away bad smells at all. Therefore, I am looking forward to seeing those people change the quality of their advertisements and 'plugging' their tooth-pastes in a more reasonable fashion. I have no objection to the green colour, but it should not have attached to it statements which are unproved, but which, on the other hand, can be proved to be false.

One knows of the advertisements for the so-called cures for incurable diseases. They always select psoriasis as one because they know very well that it is not curable by any means that we have available but is always likely to appear to get better for a while."

Proof for Claims?

MISS B. BURTON, supporting the second reading, mentioned that in 1950 the American public had the choice of sixty-five different kinds of aspirin, and that they were advertised with various qualities. Some were pure, some were certified, some dissolved faster; one advertiser said that his brand of aspirin gave quicker relief because it dissolved more speedily in water. All were tested in America by Consumers' Union. It was found upon testing that the speed with which an aspirin dissolves in water is no indication of the speed with which it is absorbed into the system.

It was equally found that there was no relationship between the speed with which it was absorbed into the system and the speed with which it cured a headache. "If in this country we had advertisements of aspirins like those to which I have referred, I presume that the manufacturers or advertisers of them would be obliged to prove their case or they would be guilty under this Bill?" she asked.

"Apparently if a certain type of tooth-paste is used one gets pinker gums than by using other types of tooth-paste. If we use another tooth-paste—I do not know whether it is a green tooth-paste, but I believe it is—we get whiter teeth than if we do not use it. If that is true, well and good, but I am hoping that under this Bill the Government will warn people who issue such advertisements that they may be called upon to prove them. I also hope that the whole field of patent medicines will be brought under this legislation."

MR. GEOFFREY HIRST supported the second reading but said that it brought into the field of trade restrictions objective terms liable to different interpretations. The word "quality," seemed open to the greatest objection.

MR. J. HUDSON gained the impression that the Bill was "just poppycock and humbug, that these magnificent phrases—what is the accuracy, what is the performance, what is the strength, what does a thing do?" would never be applied to the matter of medicated wines.

The Bill was read a second time.

PROPRIETARY ASSOCIATION

THE thirty-third annual report of the executive committee of the Proprietary Association of Great Britain presented to members of the association at the annual meeting in London on June 18 states that the total membership of the Association is now 103. Delegates from the Association have attended the British Code of Standards Committee during the year and decided or acted as follows:—

It was agreed that no claim should be made to treat baldness but that it did not prevent the advertising of a preparation designed to prevent loss of hair or to deal with an unhealthy scalp condition which might give rise to baldness.

The delegates could not support a complete ban on the mention of whooping cough and it was agreed that references to it must be confined to labels and leaflets issued with the product which state that it will alleviate the symptoms of the disease.

The Association supported a proposal to add psoriasis to section III of the code if a proviso was included to allow references to the value of medicaments in alleviating symptoms. That was agreed.

Reference to "slimming" has been deleted from section III as it is not an ailment and the following clause added to section I: "No advertisement should offer any medicinal product for the purpose of slimming, weight reduction or limitation, or figure control. Medicinal products intended to reduce appetite

will usually be regarded for slimming purposes." The use of the word "medicinal" and the reference to "appetite" will be noted.

Discussions have also taken place on rheumatism, indigestion, insomnia, where the references are to "chronic" or "persistent," and also hemorrhoids.

During the past year members submitted 933 items of advertising copy and eighty-seven labels, leaflets, cartons, etc., for approval. The figures for the previous year were 814 and seventy-two respectively.

The advisory panel raised the camphor limit in non-liquid preparations to 10 per cent. in the case of young children. In preparations containing higher proportions of menthol and camphor it was agreed that they should not be recommended for children below six years of age. A special resolution has been added to the code to deal with the problem.

The *Chairman* (Mr. F. A. S. Gwatkin), the *Vice-chairmen* (Messrs. H. G. Lazell and J. S. Walmsley) and the *Treasurer* (Mr. B. A. Elliman) were re-elected.

LOCAL OFFICERS

West Kent Branch. — *Chairman*, Mr. L. C. Mote; *Treasurer*, Mr. A. W. Jutton; *Secretary*, Mr. W. E. Walton, 184 High Street, Penge, London, S.E.20; *Assistant Secretaries*, Messrs. L. A. Jupp and B. Mendelson.

LEGAL REPORTS

Pharmacist Assaulted.—Geoffrey Machin, 42 Bridgetown, Cannock, was fined £1 with £2 2s. costs at Walsall court on June 20 for assaulting Mr. Harold Myers Probert, 479 Bloxwich Road, Walsall (pharmacist manager of a Walsall chemist's shop).

Injuries to Employee.—At Liverpool Assizes, on June 25, damages of £750 were awarded by consent to Miss Laura Grace Lidgett, 6 Kingswood Boulevard, Bebington, against Mr. Roy Pilkington, M.P.S., 40 Upton Road, Birkenhead, for injuries received on November 20, 1948, in the course of employment by him as a shop assistant. Miss Lidgett was sweeping the floor of a storeroom at Pilkington's premises with a long-handled brush. The handle struck a bottle of concentrated nitric acid which splashed over her, severely burning her face and arm.

Settlement Agreed.—In the Northern Ireland High Court on June 16 the Lord Chief Justice (Lord Macdermott) directed the adjournment of actions brought by Dr. Charles Dick, Broughshane Street, Ballymena, against J. A. Woodside & Co., Ltd., pharmaceutical chemists, Church Street, Ballymena, and S. Maw, Son & Sons, Ltd., Barnet, Herts, manufacturing chemists. The actions arise out of a case brought against Dr. Dick by Mr. John McCambridge, Ballymena, for damages for alleged negligence in treatment during the course of which two injection needles broke and lodged in plaintiff's right hip. Under terms of settlement announced in court the plaintiff received an *ex gratia* payment of £300 and costs.

Transactions in Trade-marked Blades.—In the Chancery Division, London, on July 7, Ever-Ready Razor Products, Ltd., moved for an interim injunction to restrain General & Overseas Traders, a firm, and Woodfield & Turner, a firm, from selling safety-razor blades not of the plaintiffs' manufacture, bearing on them, or on the containers, the plaintiffs' trade-mark Star. Counsel for Messrs. Ever-Ready said that neither of the defendants wished to put in any evidence, and both were prepared to give an undertaking until the trial of the action in the terms of the notice of motion. Counsel for Messrs. Woodfield & Turner said that their proper course would be to submit to an injunction. Their substantial defence was against the Ministry of Supply. Counsel for General & Overseas Traders said that, so far as they were concerned, it was a matter of complete inadvertence. They had bought surplus Government stock from the second defendants who had bought from the Ministry of Supply. His clients desired to get out of the action at the earliest possible moment, and therefore offered the undertaking, but the second defendants wished the action to continue for a decision as between themselves and the Ministry of Supply. Mr. Justice Danckwerts said that, on the undertaking given by General & Overseas Traders, there would be no order on the motion except the injunction against Messrs. Woodfield & Turner.

NEW COMPANIES

P.C.=Private Company; R.O.=Registered Office

M. T. FOSTER, LTD. (P.C.).—Capital £8,000. To acquire the business of chemists and wine merchants carried on by Nolan T. Trezise, M.P.S., trading as "M. T. Foster" at 14 Fore Street, Culmpton, Devon. Directors: N. T. Trezise and Edna M. Trezise.

D. E. DOWLING, LTD. (P.C.).—Capital £500. To acquire the business of chemist and druggist carried on as "E. H. J. Medhurst," at 37 Woodcote Road, Wallington, Surrey. Directors: Frederick H. Delafield and Doris E. Dowling, M.P.S.

SWEDISH ASTRA A.B. (LONDON), LTD. (P.C.).—Capital £10,000. To carry on the business of manufacturing and retail chemists. Subscribers: H. A. Southwell and H. Slatford. First directors are to be appointed. Solicitors: Reynolds Gorst & Porter, 7 Arundel Street, London, W.C.2.

G. O. LACEY & CO. (CROYDON), LTD. (P.C.).—Capital £100. To carry on the business of manufacturing and general chemists, etc. Subscribers: G. O. Lacey, M.P.S., and (Mrs.) J. Weisz. First directors are to be appointed by the subscribers. Solicitors: Beach & Beach, 12 Robert Adam Street, London, W.1.

BRITISH VISQUEEN, LTD. (P.C.).—Capital £240,000. To enter into an agreement with Imperial Chemical Industries, Ltd., and the Visking Corp.; to acquire the business of manufacturers of and dealers in polythene film now carried on by Imperial Chemical Industries, Ltd., in the United Kingdom. Imperial Chemical Industries, Ltd., and Visking Corp. have the right to appoint four and two directors respectively. Directors: John C. Swallow, John E. Sisson, Henry C. Raine, Alan F. Gowler, Francis C. Howard, and Arthur T. Peterson. Two-thirds of the authorised capital is to be held by I.C.I. and one-third by Visking.

Company News

Previous year's figures in parentheses

WHIFFEN & SONS, LTD.—Mr. R. S. Law (manager, technical sales department) has been appointed to the board.

J. C. & J. FIELD, LTD.—Group profit, before tax, for year ended March 31 was £94,695 (£23,078 holding company only), after providing £31,649 (£8,761) for depreciation, directors' emoluments, etc. Tax, £53,687 (£16,821); net profit, £41,008. Dividend is 30 per cent. on reorganised capital (15 per cent. on old capital).

VITAMINS, LTD.—Group profit for year ended March 31 was £63,451 (£41,518) after charging directors' emoluments, £11,249 (£10,564); depreciation, £32,835 (£24,821), etc. After providing £36,603 (£16,751) for tax, net profit was £26,848 (£27,778). At the annual meeting on July 27 a resolution will be put to increase the company's capital from £200,000 to £300,000 by the creation of 2 million 1s. ordinary shares.

BUSINESS CHANGES

JAVA TRADING, LTD., has changed its address to Carways House, 31 Norfolk Place, London, W.2.

MR. W. D. WRIGHT and MRS. J. M. WRIGHT, Ph.C., have removed to The Dolphin Pharmacy, Ingatestone, Essex, on July 9.

BOURJOIS, LTD., Standbrook House, 2 Old Bond Street, London, W.1, have had their telephone number changed to Hyde Park 1377.

PAINES & BYRNE, LTD., Greenford, Middlesex, have appointed Mrs. Nancy Wood assistant to Mr. T. W. Lemay, the company's representative for Scotland.

SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY, LTD., have appointed Mr. John Malcolm manager of their chemical sundries department (see p. 31).

Appointments

LAMBETH HOSPITAL, London, S.E.11.—Mr. W. S. Benjamin, M.P.S., has been appointed chief pharmacist from August 10.

DARLINGTON CO-OPERATIVE SOCIETY, LTD., Priestgate, Darlington, have opened a new pharmacy at 50 Yarm Road, Darlington.

STEVENSON & HOWELL, LTD., Standard Works, Southwark Street, London, S.E.1, have appointed Messrs. E. W. Judd and S. G. Lane managers of the company's home and export departments respectively.

EVANS MEDICAL SUPPLIES, LTD., Speke, Liverpool, have appointed Messrs. J. H. Robinson and R. Holland chemists' representatives for East and West respectively of the West Riding of Yorkshire.

THE WEEK IN PARLIAMENT

MR. J. STUART (Secretary of State for Scotland) told **MR. W. HANNAN** on June 30 that he had decided not to amend the Statutory Order constituting the Standing Advisory Committees on Health Centres at the present time.

MR. HANNAN further asked whether the Minister appreciated that it was accepted on both sides of the House that the establishment of Health Centres would be an integral part of the Health Service, and would follow the "good example" set by Edinburgh recently. **MR. STUART** replied that he thought the bodies he had referred to previously would be of use in the future.

Vibrio Foetus Research

In the House of Lords on July 2, **VISCOUNT HUDSON** asked what steps were being taken to counter the menace of *Vibrio foetus* in dairy herds in Great Britain.

LORD CARRINGTON in reply mentioned that the importance of *Vibrio foetus* infection had come to light only comparatively recently. Intensive research was being carried out by the Ministry of Agriculture's Veterinary Laboratory, and methods of control would continue to be published for the information of veterinary surgeons.

DEATHS

BARNETT.—On June 28, Mr. Barnett Barnett. For thirty-four years Mr. Barnett was sales manager of E. C. De Witt & Co., Ltd., East Croydon, Surrey.

CROFTS.—At Canterbury, recently, Mr. Robert Crofts, M.P.S., 57 Cromwell Road, Canterbury, aged eighty-nine. Mr. Crofts was in business in Canterbury and during the 1914-18 war did valuable work for the City hospital and ambulance services. He retired in 1936.

DILLON.—At his home, 4 St. Mary's Terrace, Esplanade, Bray, co. Wicklow, Eire, on June 27, Mr. Joseph Anthony Dillon, R.D. Mr. Dillon qualified as a Registered Druggist in 1938, and had been in business for some years.

ENGLAND.—On May 30, Mr. Reginald Arthur England, 57 Bulmershe Road, Reading, aged eighty-six. Mr. England qualified as a chemist and druggist in 1898.

ESLICK.—At his home, 51 Venn Grove, Hartley, Plymouth, recently, Mr. John James Reginald Eslick, M.P.S., aged seventy. Mr. Eslick had been in business in Plymouth for over forty years. He was a native of Cornwall and is survived by his widow and one son.

FURNIVAL.—At a nursing home in Bournemouth, on June 25, Mr. Stephen Furnival, aged sixty-nine. Mr. Furnival qualified as a chemist and druggist in 1906 and passed the Pharmaceutical Chemist examination in 1907 after studying at the College of the Pharmaceutical Society, London. After qualifying he remained at the College for some time as a demonstrator in chemistry, and later bought the business of Russell & Co., Windsor, which held a warrant of Royal Appointment. Afterwards he took over the business of the late Mr. J. F. Eardley, Sheffield, and conducted there a number of pharmacies until he retired to Bournemouth some years ago because of ill-health. For many years he was an examiner of the Pharmaceutical Society and he acted as an adviser on educational matters to the Sheffield Branch of the Society. He was a keen golfer and once won the British Pharmaceutical Conference golf competition. He is survived by his widow, a daughter, and a doctor son.

KEEN.—In the North Staffordshire Infirmary, Mr. Frederick Keen, M.P.S., whose address in the Register of Chemists and Druggists is 79 Broad Street, Stoke-on-Trent, aged fifty-nine. Mr. Keen was a native of Stoke-on-Trent and was apprenticed with Mr. J. A. Dale in that town. He had been ill for three weeks.

KENT.—On June 28, after a long illness, Mr. B. Kent (representative of James Townsend & Sons, Ltd., Little Queen Street, Exeter, for many years in the West of England).

NOBLE.—On June 29, Mrs. Annie Beatrice Noble, wife of Mr. Harry William Noble, Ph.C., 11 Clifton Avenue, Finchley, London, N.3, and mother of Mr. Harry Noble, B.Pharm., Ph.C. (secretary of the National Pharmaceutical Union).

TEMPLE.—At a hospital in Glasgow, on June 2, Mr. William Temple, M.P.S., 323 Paisley Road West, Glasgow, S.W.1, aged sixty-nine. He is survived by his widow and daughter, Miss Janet Temple, B.Sc., M.P.S.

WHITE.—At a nursing home in Glasgow, on June 20, Mr. Thomas William White, M.P.S., 6 Cavendish Drive, Newton Mearns, Renfrews, aged seventy-six.

PERSONALITIES

MESSRS. T. HESELTINE (president of the Pharmaceutical Society) and **H. STEINMAN** (a member of the Council) have each received Coronation medals.

ALDERMAN WALTER DEACON, C.B.E., M.P.S. (a member of the Council of the P h a r m a c e u t i c a l Society and president, 1939-41) is to be made an Honorary Freeman of the Borough of Bridgwater "in recognition of the public services rendered by him to the borough." Mr. Deacon is the "father" of B r i d g w a t e r



urban district council, which decided unanimously on July 2 to grant him the honour. Mr. Deacon was born at Swindon, and qualified as a chemist and druggist in 1904. He went to Bridgwater early in the present century as assistant to the late Mr. T. J. Barton, 29 Cornhill, later taking over the business and transferring it to premises which had formed part of the old post office in High Street. He became proprietor of a chain of nine pharmacies in Somerset until he retired. His presidency of the Pharmaceutical Society coincided with its centenary. He was chairman of the Society's Central War Committee and is still a member of both the Statutory and Publications Committees. He is a member of the Mid-Somerset Divisional Executive, a former member of the Poisons Board, and represents the Society on the Court of Governors of Bristol University. In 1941 he was awarded the C.B.E. for his public services and a year later the University of Bristol made him master of Science *honoris causa*. Mr. Deacon's membership of Bridgwater town council began in 1919. His term of office as mayor, 1925-27, included the Charter-day, Bridgwater pageant and other events. He became alderman in 1926 and for many years he has been chairman of the health committee. He is a member of Mid-Somerset Divisional Executive, chairman of the Grammar School for Girls and a governor of Dr. Morgan's School. As a justice of the peace he is chairman of Bridgwater borough magistrates and a member of the county bench. Radiography as well as pharmacy has claimed Mr. Deacon's attention. He is a founder member of the Society of Radiographers and a former member of its executive committee. At one time he was radi-

ographer as well as pharmacist to Bridgwater Hospital. Under the National Health Service he was chairman of the Hospital Management Committee for several years. Two other sides to his manifold activities are his connection with the Methodist church in which he has been prominent, and his secretaryship of the Traders' Association, of which he was one of the founders and which has now become the Bridgwater Chamber of Trade. He is a lecturer both in this country and in Holland, and a broadcaster—he broadcast on "100 Years of Pharmacy" in connection with the Pharmaceutical Society's Centenary.

MR. JAMES WILSON, M.P.S., 6 Longview Road, Huyton, Liverpool, has been elected to the council of Prescot, Lanes, Rotary Club.

MR. JAMES WOODSIDE (manager of the chemical sundries departments, Scottish Co-operative Wholesale Society, Ltd.), has retired after fifty-one years' service.

MR. A. HOWARD GRETTON (son of Mr. H. T. A. Gretton, M.P.S., Nottingham), recently gained the diplomas of M.R.C.S. and L.R.C.P. and the degrees of M.B. and B.Sc. of London University.

MR. T. A. TAYLOR, M.P.S., D.B.A. (the manager of the E. & W. Smith, Camberley, branch of Arnold M. Gee, Ltd., London, S.W.19, has been returned unopposed in a by-election in the West ward, Frimley and Camberley urban district council, Surrey.

MR. HERBERT W. GAMBLE, O.B.E., M.P.S.N.I., chairman of the Northern Ireland Local Pharmaceutical Committee, had the honour of presenting an address to the Queen on behalf of the General Health Services Board during Her Majesty's Coronation visit to Northern Ireland on July 2.

MR. W. FRANK M. KEYS (the present captain, Irish Chemists' Golfing Society) comes of a medical family. He is a son of the late Dr. John Keys, Dublin, and has a brother who is a medical practitioner. He entered pharmacy as an apprentice with Hayes, Conyngham & Robinson, Ltd., and qualified in 1931. For a period he gained experience with Boots, Ltd., in London, and then returned to Dublin and managed several of the H.C. & R. branches. Then he joined Coty, Ltd., and later Dalmas, Ltd. As the Coty representative he covered the whole of Ireland and part of Scotland. In 1948 he became associated with F. H. Steele & Co., manufacturing chemists, Blackrock, co. Dublin. He is a member of the Castle Golf Club, Rathfarnham, and plays to a good handicap. At social gatherings he is much in demand as an excellent entertainer.



TRADE NOTES

In Short Supply.—The Distillers Co. (Biochemicals), Ltd., Speke, Liverpool, 19, report an acute shortage of Distivit vitamin B₁₂.

Display Material.—Secto Co., Ltd., Shaw Street, Blackburn, have produced



for their new 4 oz. aerosol (illustrated) red, white and blue showcards and crowner cards.

Display Bonus.—Roberts Windsor Soap Co., Ltd., Windsor, are offering a 5 per cent. display discount on all orders (minimum two cases) received prior to August 31 for Derbac soap and liquid Derbac.

Immediately Available.—Industrial Appliances, Ltd., 21 Grosvenor Street, London, W.1, state that supplies of Poly-tainer polythene containers are now immediately available from the largest range of stock moulds in the United Kingdom.

Relief of Hay Fever.—Riddell Products, Ltd., Axtell House, Warwick Street, Regent Street, London, W.1, offer Riddobron nasal ointment for the relief of hay asthma, allergic coryza, and hay fever. It is supplied in tubes containing 5, 10 and 30 gm.

Error in Advertisement.—A reference to the *Lancet* in an announcement by Evans Medical Supplies, Ltd., Speke, Liverpool, 19, about Novo Lente insulins in THE CHEMIST AND DRUGGIST, July 4, should have given the page number as 1087 and not as printed.

Easily Cleaned Hairbrush for Men.—Hindes, Ltd., Bromsgrove Street, Birmingham, 5, have designed a hairbrush for men that may be readily cleaned by lifting a movable base plate, drawing the deeply embedded hair to the top, returning the plate to its original position, and simply combing the hair away.

Tablets in Bulk.—Manufacture of tablets is undertaken by BROOK, PARKER & CO., LTD., Ashfield, Bradford, Yorks; the THREE CROWNS TABLET CO., 21 Derringham Street, Hull; the TOWER PILL AND TABLET CO., LTD., 46 Penton Street, London, N.1; and JOHN TYE & SON, LTD., 457 Caledonian Road, London, N.7.

Distribution Change.—As a result of the acquisition of the Angier Chemical Co., Ltd., by the Bristol-Myers Co., Ltd., New York and London, the sole selling and distributing agents in the United Kingdom since July 1 for Angier's emulsion, Supavite, Junior aspirin and halibut-liver oil capsules have been J. C. Gambles & Co., Ltd., 209 Blackfriars Road, London, S.E.1.

Reintroduced.—T. V. DUNCAN, 181 Blairbeth Road, Burnside, Lanarks, is again supplying the German speciality Ilon abscess salve, "an infallible remedy for the treatment and elimination of boils, carbuncles and abscesses." The principal distributors are the New Apothecaries Co., Ltd., 59 Glassford Street, Glasgow, C.1. — WILLIAM MARTINDALE WHOLESALE, LTD., 14 Bruton Street, London, W.1, are sole agents in the United Kingdom for the recently reintroduced product Bronchovyrin, which is now being manufactured in Britain. Particulars of packs and prices are available on application to the distributors.

"100 per cent." Rat Kill.—Sorex (London), Ltd., 6 Henrietta Place, London, W.1, claim that Sorex rodenticide can be used throughout the year without decrease of effectiveness and that when correctly used it invariably gives a 100 per cent. kill. Sorex 1, for use against the common rat, contains 0.1 per cent. warfarin; Sorex 5 contains 0.5 per cent. warfarin and is intended for use against ship rats, mice or mixed infestations. Both are available in quantities of 1, 6, 28, 56 and 112 lb., and both have official approval.

Annual Holidays.—HERTS PHARMACEUTICALS, LTD., Welwyn Garden City, Herts, announce that their factory and offices will be closed for annual holiday from July 31 to August 14; a minimum staff will be maintained to deal with urgent orders. — The works of MANESTY MACHINES, LTD., Speke, Liverpool, 19, will be closed July 13-24, during which period only urgent

orders for spare parts will be attended to. — The works of the PLESSEY CO., LTD., Vicarage Lane, Ilford, Essex, are closing from Friday afternoon, July 17, until Tuesday morning, August 4, for annual holiday.

Redesigned.—Fibrenyle, Ltd., 157 Dukes Road, London, W.3, have redesigned their dual-purpose infant feeder to incorporate additional features without sacrificing the advantages of using the bottle as a measure for preparing the feed, unbreakability, and wide mouth. The newly adopted "no-germ" polythene cap ensures that the teat is completely enclosed, thus keeping it clean and hygienic when the feed has been prepared. The bottle is now fitted with a Skylon brand anti-colic valve teat made exclusively for the company. The teat enables the feed to proceed uninterrupted. A new leaflet issued with the feeder gives a description of a method for the cold sterilisation of all components.

Polythene Film Factory.—Construction has started at Stevenage, Herts, of the headquarters and factory of British Visqueen, Ltd. (see p. 30), the company formed jointly by Imperial Chemical Industries, Ltd., and the Visking Corporation, Chicago, U.S.A., to manufacture polythene film in Britain. Polythene was discovered in I.C.I. laboratories in 1933 and I.C.I. has pioneered its manufacture in film form in Great Britain. The film is described as transparent, tough, inert, moisture- and water-proof, and is used for packaging many commodities, including pharmaceuticals and chemicals. The Visking Corporation was formed in 1925 to manufacture seamless transparent tubes from regenerated cellulose. During the 1939-45 war, at the request of the United States Government, the Corporation developed a process for manufacturing unsupported packaging film from polythene and today is the world's largest producer of polythene film.



THE CHEMIST AND DRUGGIST IN CANADA: A view of the "British business and specialised journals" section of the Canadian International Trade Fair held in Toronto, Canada, June 1-12. THE CHEMIST AND DRUGGIST and associated papers were on show.

NEW PRODUCTS AND PACKS

Dispensing Size. — William R. Warner & Co., Ltd., Power Road, London, W.4, have made available an 80-oz. dispensing bottle of Agarol (mineral oil with agar).

Introductory Offer. — To introduce their new liquid shampoo with lanolin, Evan Williams Co., Ltd., Aintree Road, Perivale, Middlesex, are supplying three doz. sachets free with orders for three doz.

Nylon Powder Puff. — The Nylo-Puff, a powder puff offered by Nylo Puff, Ltd., 91A High Street, Camberley, Surrey, is washable, long-lasting and double-sided. It is supplied in pastel shades and in two sizes (3 in. and 5 in. diameter).

Antihistaminic and Antibacterial Cream. — Pharmaceutical Specialities

(May & Baker), Ltd., Dagenham, have introduced new-formula Phenergan cream, combining antibacterial with antihistaminic and analgesic properties. Phenergan cream is issued in a collapsible tube.

Additions to Series. — Henry C. Miner, Ltd., Hook Rise, Kingston By-pass, Surbiton, Surrey, have added to their Freshness series of toilet preparations Miner's shampoo, a liquid soapless shampoo containing chlorophyll, and Miner's deodorant talc, a chlorophyll-containing bath powder.

Antihistamine with Calamine. — A cream containing an antihistamine (Mepyramine maleate) with calamine, benzocaine and hexylated metaeresol has been introduced by Sharp & Dohme, Ltd., Hoddesdon, Herts, for use in the

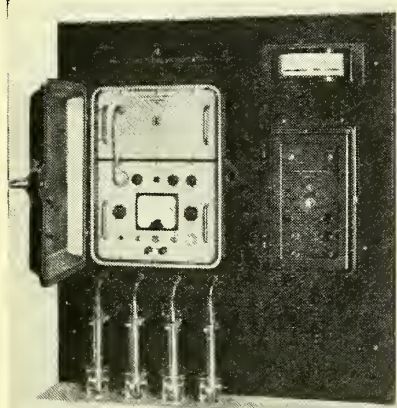
treatment of pruritus, insect bites, urticaria, minor sunburn, etc. The product is packed in 1-oz. and 4-oz. tubes.

Sulphonamide in Contrast Medium. — The value in bronchography of a mixture of Lipiodol with sulphanilamide has led Bengué & Co., Ltd., Mount Pleasant, Alperton, Wembley, to present Lipiodol-sulphanilamide, a mixture containing finely powdered sulphanilamide with 40 per cent. Lipiodol. In order to obtain a homogeneous contrast medium it is only necessary to stir the mixture prior to use. The product is understood to have the advantage, among others, over Lipiodol that it penetrates more slowly into the bronchi, and thus enables the degree and level of opacity to be checked by radiography if desired. It is issued in a 20-c.c. bottle.

INDUSTRIAL AND LABORATORY INSTRUMENTS

THE British Instrument Industries Exhibition, 1953, was held at Olympia, London, June 30 to July 11. A range of scientific apparatus, some of it representing new developments for use in industry and research, was exhibited of which the following are applicable to the pharmaceutical and chemical industries.

Among apparatus shown by BAIRD & TATLOCK (LONDON), LTD., Chadwell



Multi electrode pH indicator (Electronic Instruments, Ltd.). In the illustration the apparatus is shown connected to four liquid samples in beakers (representing in practice up to six vats).

Heath, Essex, was a laboratory multi-centrifuge capable of dealing with containers ranging from 50-mil tubes to M.R.C. plasma bottles. Risk of overloading is avoided for, if the machine is switched off when still adjusted for high speed, it cannot be restarted until the speed control knob has been turned to zero. Also if the operator turns the knob up too fast the machine is automatically switched off. A magnetic stirrer on show had as an extra attachment a flexible cable drive for connection to other pieces of apparatus.

All-glass hypodermic syringes with standardised parts for easy replacement were shown by CHANCE BROTHERS, LTD., Smethwick, Birmingham. The high precision of the bore of the com-

pany's Veridia glass tubing was demonstrated in a special display. Also shown were a large block of optical glass which had been prepared by the new method of pouring molten glass into a mould and bricks of lead glass for shielding operators in radioactive processes and in radioisotope laboratories.

W. EDWARDS & CO., (LONDON), LTD., London, S.E. 26, showed a water jet exhaust pump for routine laboratory work in plastic material.

Featured on the stand of ELECTRONIC INSTRUMENTS, LTD., Richmond, Surrey, was the multi-electrode pH indicator which was designed to record the pH values at various stages in a manufacturing process without the necessity of removing samples from the vats while using only one recording unit. In use, electrodes are introduced into up to six vats and the recording unit gives, in rotation, the readings for the liquids being tested and indicates what vat each particular reading refers to. The change from contact with one vat to that with another may be made manually as well as automatically.

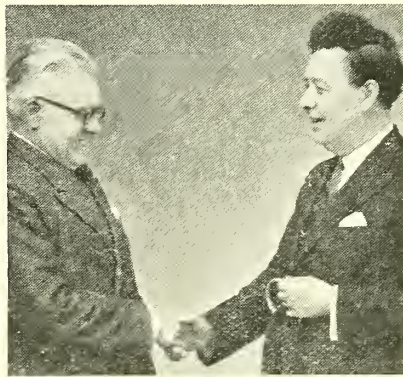
On the stand of GRIFFIN & TATLOCK, LTD., London, W.C.2, was a Pyrex visible flow continuous water still for the production of pyrogen-free water at 3.5 litres per hour. The still is in seven parts each of which can be supplied separately and was developed and tested in co-operation with the School of Pharmacy, University of London.

JOHNSONS OF HENDON, LTD., London, N.W.4, showed their Autoscope, a slide projector having a magazine into which slides of a special design (Autoslides) are loaded so that the latter may be changed automatically when a knob is operated. Also shown was a photographic light stand consisting of a long boom mounted on a tripod. The angle and extension of the boom can be varied and the apparatus can be supplied either as a separate unit or as an attachment to be used in conjunction with the company's Multilite or Multiflood outfit.

A range of laboratory apparatus was shown by TOWNSON & MERCER, LTD., Croydon, Surrey. The new items displayed were:—The Aliglass pipette washer: pipettes are placed vertically

in a deep glass vessel and by means of a water inlet below and a syphon the vessel when connected to the water main fills and partially empties itself in alternation; the L.T. radiant heater for flasks; the heating element is shaped like a hollow cone so that flasks of different sizes may be accommodated, and the whole is enclosed in an outer of sindango insulating material; a Karl Fischer moisture determination apparatus mounted on a metal stand; a redesigned Warburg apparatus (for measuring the gaseous products of metabolism of tissue cultures); the manometers are arranged around a circular tank instead of along the sides of a long one and the water in the thermostatically controlled water bath circulated by an immersion pump which ejects a strong stream of water under the surface; and polythene squeeze-operated wash bottles fitted with spill-proof flanged washer.

The growing size of the industry was indicated at the exhibition's inaugural luncheon by the Minister of Supply (MR. DUNCAN SANDYS) who revealed that the annual production in Britain of scientific instruments amounted to £50 millions.



LONG SERVICE PRESENTATION: Mr. G. Spring, Romford (senior representative, F. W. Hampshire & Co., Ltd., Sunnydale, Derby) (left) receiving a gold watch (a recognition by the directors of the company of twenty-five years' service by him) from Mr. W. H. Watkin (sales manager).

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

A MEETING of the Council of the Pharmaceutical Society was held in London on June 30 and July 1, the president (Mr. T. Heselstine) in the chair.

A letter from the Home Secretary conveying the thanks of Her Majesty the Queen and appreciation for the Loyal Address (*C. & D.*, May 30, p. 533) submitted on behalf of the Society was read.

MR. ADAMS submitted a letter from Mr. A. A. Meldrum in which he said that he had decided with regret to resign from the Society's Council. He had of late found difficulty in maintaining the pace and would rather make way for a younger man with fresh ideas. He was in complete agreement with the general policy and aims of the Council and wished all success for their future work. THE PRESIDENT said that they would all have wished that Mr. Meldrum could have been present to take his leave of them in person but for business reasons that was not possible. At the next Council meeting nominations for the vacancy would be received and co-option would take place at the October meeting. The Council accepted Mr. Meldrum's resignation with regret, and placed on record its appreciation of the services he had rendered to the Society during the years of his membership of the Council.

A letter from Mr. John Hall, M.P., thanked the Council for the gift of a bound volume containing copies of the documents connected with the Pharmacy Act, 1953, that he had introduced into Parliament.

The Council committees chairmen for 1953-54 are as follows:—*Benevolent Fund and War Aid*, Mr. T. Reid; *Education*, Mr. C. W. Maplethorpe; *Establishment*, Mr. F. C. Wilson; *Finance*, The treasurer (Mr. W. S. Howells); *Ethical*, Mr. G. Hinchliffe; *Law*, Mr. H. Steinman; *Organisation*, Mr. G. H. Hughes; *Publications*, Dr. B. A. Young; and *Public Services*, Mr. D. W. Hudson.

The Council decided to invite the International Pharmaceutical Federation to meet in London in September 1955. Mr. W. J. Tristram was reappointed the Society's representative on the council of the Federation, and it was agreed that while he could not attend because of other commitments the president should act in his place.

The Council approved the acceptance of an invitation from the Society of Public Analysts for the Society to participate in a joint meeting to discuss the assay of pyrogens.

The Organisation Committee considered the resolution of the annual meeting calling for the exchange of delegations of British pharmacists with pharmacists from other United Nations countries and decided that a report should be prepared on a possible exchange programme. Further decisions regarding resolutions passed at the May Branch Representatives' meeting were taken.

Branch Representatives' Resolutions

The Organisation Committee agreed that the wording of Rule 9 of the model rules for Branches should be amended. The Council approved the following wording:—

"The officers of the Branch shall be elected . . . The representatives of the Branch to attend the British Pharmaceutical Conference or any Branch Representatives' meeting shall be elected at a general meeting of the Branch."

Notice of Business. The following statement was authorised:—

The Council appreciate the need for reasonable notice being given of subjects to be submitted by the Council for consideration at the annual and Branch Representatives' meetings. The Council cannot agree, however, that a period of at least three months is necessarily appropriate notice in all cases. The amount of time which Branches and members may need to study subjects which are to be discussed at these meetings will vary according to the nature of the subjects and the exigencies of the situation.

The Organisation Committee noted that only three

Branches had sent comments on a letter pointing out that many Branches had no representatives at Branch Representatives' meetings and asking for the reason. It was agreed that members of Council should be asked to give that matter special attention when visiting Branches. It was reported that in view of the lack of response to the refresher courses arranged at Leicester and Sunderland, which had been cancelled, a letter had been sent to all Branch secretaries asking for the views of members on the position.

Progress with Films

A progress report of the Films Committee was received. It stated that inquiries made by the Committee showed a need for a series of films and film strips to supplement and illustrate the teaching of bacteriology and the preparation of sterile pharmaceutical products. Further inquiries suggested that a series of films on the following subjects would meet requirements:—Elementary bacteriology, small-scale sterilisation, aseptic techniques, antiseptics and germicides, and sterility testing. A colour film illustrating the fundamental technique of sterility testing had already been prepared and would be available in the autumn. Synopses of some 120 American films had been considered and a short list of films selected. The U.S. Embassy had been asked to obtain copies of the films for use in Britain.

The Public Services Committee received from the Co-ordinating Committee with the Guild of Public Pharmacists a report on a complaint that hospitals were using official titles for preparations that did not conform with the official formulas. It was decided that a letter should be sent to the Minister of Health calling attention to that practice and to the resultant difficulties.

MISS ISLIP called attention to a children's television programme in the course of which the persons telling the story picked up a medicine bottle and "took a swig" from it. She thought that most unfortunate when the Society was trying to inculcate careful handling of medicines, especially where children were concerned. It was decided to take up the matter with the British Broadcasting Corporation.

MR. D. W. HUDSON (chairman, British Section of the Franco-British Pharmaceutical Commission) presented a report of the Congress held at Harrogate, May 15-18, at which eighty-seven French and 103 British pharmacists were present (see *C. & D.*, May 23, p. 526). The report expressed the opinion that the work of the Commission was becoming more widely known and appreciated. The Congress had paid for itself with perhaps a small credit balance. Many of the guests had attended one or both of the previous Congresses and there had been a friendly air of reunion between French and British. The experience of the congress had confirmed the opinion that it was essential to leave a maximum of free time for guests as it was then that friendships were formed and the greatest gain for the objects of the Commission achieved. The Council agreed that a letter of thanks should be sent to the Thames Valley Branch of the Society for entertaining some of the French party at Hampton Court on their return journey. The Council expressed its thanks to Mr. Hudson for the detailed work that he continued to put into the organisation of the British Section's activities.

On the recommendation of the Education Committee the Council appointed the president, the chairman of the Committee, and Professor A. D. Macdonald to the adjudicating committee for the award of the Wellcome Pharmaceutical Research Fellowship for 1953. It was reported that a further sum of £1,000 had been made available for the Fellowship by the Wellcome Trustees, and the secretary was asked to convey to them the Council's appreciation. Sir Henry Dale, Professor Elliott and Professor Macdonald were appointed to the recommending committee of the Society

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ACTON HOSPITAL, GUNNERSBURY LANE, W.3

ASSISTANT IN DISPENSING (part-time) required for two afternoons per week (Tuesday and Wednesday). Whitley Council salary and conditions of service. Applications to Hospital Secretary within 14 days. C 5694

BARNET GENERAL HOSPITAL, WELLHOUSE LANE, BARNET, HERTS (478 Beds)

SENIOR PHARMACIST required at this busy hospital. Pleasant environment. Whitley salary plus London Weighting. Applications stating age, qualifications and names of two referees to the Hospital Secretary. C 5693

CONNAUGHT HOSPITAL, WALTHAMSTOW, E.17

Locum assistant in dispensing. (Apothecaries' Hall Certificate), required September 14 to 26. Applications to Secretary, H.M.C. Forest Group, Langthorne Road, E.11. C 5663

CONNAUGHT HOSPITAL, WALTHAMSTOW, E.17

LOCUM CHIEF PHARMACIST required as soon as possible for 1 or 2 weeks. Salary 14 gns. per week. Apply with full particulars and copy testimonials to the Secretary, H.M.C. Forest Group, Langthorne Road, E.11. C 5672

CRUMPSALL HOSPITAL, MANCHESTER, 8 (Adult General, 1,225 Beds)

Vacancies exist for two Pharmacists and applications are invited for these posts. Salary and conditions of service as laid down by the Whitley Council. Applications, stating age, nationality, details of experience, together with the names and addresses of two referees, are to be sent to the undersigned as soon as possible, Dept. "C.D."

A. T. SAMPSON,
Group Secretary.
C 161

HACKNEY GROUP HOSPITAL MANAGEMENT COMMITTEE, LONDON, E.9

PHARMACIST required for Hackney Hospital. Whitley Council salary and conditions. Applications to Secretary, Hackney Group Hospital Management Committee, London, E.9. C 156

HARROGATE AND RIPON HOSPITAL MANAGEMENT COMMITTEE ROYAL BATH HOSPITAL, HARROGATE

Applications are invited for the post of CHIEF PHARMACIST (male or female) at the above hospital. This hospital is one of a Sub-group of four hospitals, and the pharmacist will be responsible for dispensing, etc., in respect of the four hospitals.

Salary will be in accordance with the scale £575 x £25—£675 per annum. The appointment will be subject to Whitley Council conditions of service, and the National Health Service Superannuation Regulations.

Applications giving details of age, qualifications and experience, together with the names and addresses of two referees to be forwarded immediately to the Group Secretary, Hereford Lodge, Cornwall Road, Harrogate. C 5647

HILL END HOSPITAL, ST. ALBANS, HERTS.

CHIEF PHARMACIST (Locum Tenens), non-resident, male or female, wanted for a period of about seven weeks from the beginning of August, 1953. Salary fourteen guineas per week. Apply stating full particulars of experience to Medical Superintendent, Hill End Hospital, St. Albans, Herts. C 5679

HULL (A) GROUP HOSPITAL MANAGEMENT COMMITTEE HULL ROYAL INFIRMARY

Applications are invited for the post of SENIOR PHARMACIST.

Salary and conditions of service in accordance with the Pharmaceutical Whitley Council decisions £525 x £25—£625 per annum, plus a special allowance of £25 per annum for recognised higher qualifications. The post is also subject to the National Health Service Superannuation Regulations. Applications to the Hospital Secretary. C 5631

ST. BARTHOLOMEW'S HOSPITAL, LONDON, E.C.1

PHARMACIST. A vacancy exists at St. Bartholomew's Hospital, London, E.C.1. Salary in accordance with the Whitley Council Scale. Write, enclosing two copies of testimonials to the Pharmacist. C 5633

KETTERING AND DISTRICT HOSPITAL MANAGEMENT COMMITTEE, KETTERING GENERAL HOSPITAL, KETTERING (131 beds)

ASSISTANT in dispensing required in the Pharmacy of the above Hospital to commence on or after 13/7/53. Candidates must possess the certificate of the Society of Apothecaries of London or a similar qualification. Salary £165 at 18 years, rising to £385 at 30 years of age. Applications, stating age, qualifications and experience, accompanied by the names of two referees, should be sent to the Group Secretary at above address immediately. C 5669

MID GLAMORGAN HOSPITAL MANAGEMENT COMMITTEE

Applications are invited for the post of pharmacist at:—

BRIDGEND GENERAL HOSPITAL, QUARELLA ROAD, BRIDGEND (364 Beds)

Salary and conditions of service in accordance with Pharmaceutical Whitley Council. Applications, naming two referees to be addressed to the Secretary of the Committee, 8 Wind Street, Neath. C 5682

ST. ALBANS CITY HOSPITAL, NORMANDY ROAD, ST. ALBANS, HERTS

SENIOR PHARMACIST required at the above Hospital about November 1, 1953. Salary and conditions of service in accordance with Whitley Council Scale. Applications, stating age, qualifications and experience, together with the names of two referees, should be forwarded to the Chief Pharmacist, as above. C 5662

ST. LUKE'S HOSPITAL, BRADFORD

PHARMACIST (female) required. General and Maternity Hospital (Category V). Up-to-date department. Opportunity for specialisation. Whitley Council salary and conditions. Apply Hospital Secretary. C 5683

ST. MARK'S HOSPITAL, CITY ROAD, LONDON, E.C.1 Category I

Applications for the appointment of CHIEF PHARMACIST at the above hospital. Salary scale £575 x £25—£675 p.a. plus London Weighting. Other terms and conditions in accordance with Pharmaceutical Whitley Council. Age, qualifications, experience, names of two referees to Secretary, Board of Governors, Hammersmith, West London and St. Mark's Hospitals, Du Cane Road, London, W.12, by July 25, 1953. C 5698

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LOCUM PHARMACIST required for relief duties at the City General Hospital, 15 gns. per week.

Apply, giving full details (including period for which available) to the undersigned at Nether Edge Hospital, Sheffield, 11.

W. STANSFIELD.

Secretary.
C 5652

THE ROYAL FREE HOSPITAL, GRAY'S INN ROAD, W.C.1

Applications are invited for the post of Pharmacist at the above hospital. Salary £450 (at age 23) x £25 p.a. to £575 p.a., London Weighting of £20 p.a. under age 26 and £30 p.a. age 26 and over. An additional £25 p.a. will be paid to candidates possessing B.Pharm., Ph.C., etc. Applications, stating age, experience and referees should be addressed to the Group Chief Pharmacist, Royal Free Hospital, Gray's Inn Road, W.C.1.

C 5695

THE ROYAL FREE HOSPITAL GROUP

Applications are invited for the post of Pharmacist at the North Western Branch and Hampstead General Hospital, Hampstead, N.W.3. Salary £450 (at age 23) x £25 p.a. to £575 p.a., plus London Weighting of £20 p.a. under age 26 and £30 p.a. age 26 and over. An additional £25 p.a. will be paid to candidates possessing B.Pharm., Ph.C., etc. Applications, stating age, experience and referees should be addressed to the Group Chief Pharmacist, Royal Free Hospital, Gray's Inn Road, W.C.1.

C 5696

WEST MIDDLESEX HOSPITAL (SOUTH WEST MIDDLESEX HOSPITAL MANAGEMENT COMMITTEE)

LOCUM PHARMACIST required from July 1 to October 31, 1953. Salary £12 12s. per week.

Applications, stating age, qualifications and experience with names of two referees to Chief Pharmacist, West Middlesex Hospital, Isleworth, Middlesex.

C 5649

WEST MIDDLESEX HOSPITAL Assistant in Dispensing required at West Middlesex Hospital for indefinite period. Salary at the rate of £320 per annum at age 22 or over, plus London Weighting. Hospital experience an advantage. Post-graduate Student considered. Salary in accordance with Whitley Council Agreement. Apply (in own handwriting) giving full details of training, experience, etc., to Chief Pharmacist, West Middlesex Hospital, Isleworth, Middlesex.

C 5650

WEST MIDDLESEX HOSPITAL (SOUTH WEST MIDDLESEX HOSPITAL MANAGEMENT COMMITTEE)

Pharmacist required at above Hospital. Salary scale £450 x £25 to £575 plus London Weighting. Higher qualification allowance £25 per annum. Whitley Conditions applicable. Applications stating age, qualifications and experience with names of two referees to Chief Pharmacist, West Middlesex Hospital, Isleworth, Middlesex.

C 5648

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E.15 DISTRICT. Pharmacist, mainly dispensing duties, hours 9-7; Thursday 9-1. No Sunday except rota. Staff kept for clerical work, window dressing, etc. Comfortable position, permanent, would suit middle-aged person, £832, plus rota fees and commission. Box C 3985.
FRANCIS & CO., Chemists, Wrexham, require additional lady or gentlemen pharmacists to supplement qualified staff. Congenial position, reasonable hours, and excellent support. Good salary offered. Please give full particulars in first letter.

C 3997

HAYES, MIDDLESEX. Excellent opportunity for ambitious pharmacist to take over management of busy branch. Good dispensing and photographic departments, well-fitted shop with adequate supporting staff. Generous salary and commission, pension scheme, etc. Apply to Box C 3992.

MANAGER, lady or gentleman, for modern pharmacy. No rota, holiday or Sunday duties. Hours 9 a.m. to 6.15 p.m. 1½ hours lunch, £850 p.a. Accommodation for single person. Apply Pleasance Pharmacy, 2 Odeon Parade, Eltham, S.E.9. Telephone: Eltham 3344. C 3972
MANSFIELD, NOTTS. Manager required for branch shop. Salary £12 per week and commission plus rent-free flat. Ample scope for development. Apply Box C 3999.

NORTH FINCHLEY. Pharmacy manager required for nicely fitted branch in pleasant area. Modern, self-contained flat over business available with garage space. Middle-class family type business with opportunity for optics if required (optional). Good salary and commission, permanency, superannuation benefits. Apply to Box C 3993.

NORTH KENSINGTON. Superintendent/manager required for a private pharmacy. Salary £800 2 year plus commission. Living accommodation available. Prospects of partnership. Phone: New Cross 5780 or write Box C 4001.

OXFORD. Branch manager required for medium class business. Permanency with good scope and prospects. Attractively situated riverside house with garden and orchard available if required. Please apply with usual particulars to Burbank, Ltd., Walton St., Oxford.

C 4011

PHARMACIST REQUIRED as manager for South London pharmacy. Good prospects. Commencing salary £728 per annum with tenancy of attractive modern semi-detached house in Streatham, 30 minutes from the business. Also, qualified lady or gentleman required as assistant pharmacist. Temporary or permanent position. J. W. Douglas, Ltd., 164 Lambeth Walk, S.E.11.

C 160

PHARMACIST (male) required as assistant manager. Good prospects. Superannuation scheme. Hours 9 a.m. to 5.30 p.m. and 1 p.m. Saturdays. No Sunday or holiday duty. Apply in writing, stating age, experience and salary expected, to Staff Manager, Army & Navy Stores, Ltd., 12 Artillery Row, S.W.1.

C 152

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QUALIFIED WANTED for relief, few hours daily, very light duties. Suitable for elderly or semi-retired person. Mutual arrangement of remuneration according to hours desired. Near Wanstead, E.11. Please reply Box C 3984.

SOUTH STAFFORDSHIRE. Qualified manager required. Private company. Good opportunity for active man. Excellent self-contained flat. Good salary and profit sharing arrangement. State age, experience, whether married, etc., to: A. S. Price & Co., Ltd., 181/2 High Street, Blackheath, Birmingham. C 3988
STRATFORD, LONDON. Unqualified dispensing assistant required, lady or gentleman, £8 per week. Comfortable permanency. Particulars to Box C 3983.

UNQUALIFIED ASSISTANT, young, either sex, required for E. Finchley pharmacy. Fully experienced counter and dispensing. Apply with details age, experience, salary required to J. Sharott, 25 Aylmer Parade, N.2, or phone Gladstone 9168 after 7 p.m.

C 3982

WATFORD. Pharmacist required as assistant manager. Liberal salary. House available. Also unqualified dispenser required. Apply with full particulars, salary required, etc., to H. Page, 47 High St., Watford.

C 4010

LOCUMS WANTED

LOCUM PHARMACISTS required for London and Suburban areas, long or short periods, July-October. Permanency at conclusion of tour if required. Salary and expenses basis. Apply to H. Warburton, M.P.S., Chief Pharmacist, London Co-operative Chemists, Ltd., Grange Road, Leyton, E.10. C 3994

QUALIFIED LOCUM. Lady or gentleman required as locum from August 24 to September 11 inclusive. Would suit Australian or any pharmacist wishing to see English countryside. Please state terms to G. Turner (Biggleswade), Ltd., 63 High St., Biggleswade, Bedfordshire. Phone 2132.

C 4015

RETAIL (OVERSEAS)

TWO PHARMACISTS, single men, required for retail service in East Africa. Starting salary £810 per annum x £30 to £900 x £50 to £1,100 per annum, including local leave followed by home leave on full basic pay. Kit allowance and free passage both ways. Contract renewable at end of tour by mutual agreement. Applicants must hold M.P.S. qualification of Great Britain or Northern Ireland. Apply, in writing, giving qualifications and experience, Box C 5609.

WHOLESALE

A LEADING MANUFACTURER invites applications from pharmacists or unqualified men with pharmaceutical experience for the position of representative in the South London area (including Surrey and Berks) and for the position of representative in the South-western Counties area. Candidates should be under 35 years of age and resident or willing to reside in the area in which they are interested. Previous experience of medical propaganda and selling to the trade, although desirable, is not essential as initial training is provided. The appointment offers a permanent salaried position with the advantages of a generous superannuation scheme. A car is provided and full expenses allowed. Apply, in the first instance by letter, giving full details of age, experience, and salary expected to Box C 5684. Staff have been informed of this advertisement.

APPPLICATIONS are invited for the post of medical representative in Scotland. Pharmaceutical qualification desirable, but consideration will be given to unqualified applicants with comparable knowledge. Remuneration is by salary and expenses and is progressive. A car is provided. Previous experience not essential as the successful applicant will be required to undergo a course of training. Applications will be treated in the strictest confidence and should be addressed to: Sales Director, Bayer Products, Ltd., Africa House, Kingsway, London, W.C.2.

C 5688

Situations Open—Continued

AYRTON SAUNDERS & CO., LTD., ANALYST REQUIRED

Applicants should have Ph.C. or equivalent qualification and preferably have had some experience. Age under 35. Salary according to qualifications and experience, 5-day week. Pension scheme. C 5665

ALLEN & HANBURYS, LTD., Bethnal Green, E.2, require pharmacist as assistant to manager of drug department. Excellent opportunity to acquire experience of wholesale drug trade in an organisation large enough to offer opportunities for internal promotion. The post is pensionable—five-day week. Apply, in writing, giving details of age, qualifications and experience, to Personnel Manager. C 5640

AN EXPERIENCED DRUG and ethical assembler and processor required. Some extemporaneous dispensing experience a great asset, must be able to work reliably on own initiative. Must have a good knowledge of drugs and galenicals. Apply to Biorex Laboratories, Ltd., 51 Exmouth Mkt., E.C.1, or phone: Terminus 1431. C 4000

BURROUGHS WELLCOME & CO. VETERINARY REPRESENTATIVE

Burroughs Wellcome & Co. invite applications from pharmacists for appointment to the representative staff of the Veterinary Sales Division. Applicants should be under 35 years of age and possess a good knowledge of veterinary therapeutics. Previous experience in detailing veterinary surgeons an advantage but is not essential as extensive training will be given. The successful candidate will be required to take up residence in any of the following areas: Glasgow, South-west Scotland, Northern counties of England, Lancashire, Yorkshire. The position is permanent, progressive, and pensionable (contributory scheme). Applications (by letter only, with recent photograph if possible) giving full details of education, qualifications and experience, should be addressed to the Manager, Veterinary Sales Division, Burroughs Wellcome & Co., 183-193 Euston Rd., London, N.W.1. C 5697

CALMIC, LIMITED, require an experienced medical propagandist for the Yorkshire district. Applicants must own car. Car allowance and all expenses paid. Pension scheme. Applicants should state salary required and give details of career to date to: General Sales Manager, Calmic, Limited, Crewe, Cheshire. C 5671

CHEN YU, LTD., require Cosmetic Representative of exceptional calibre for responsible post in South London and Southern Home Counties area. Applicant must be experienced in merchandising top class cosmetics and be prepared to reside in the area. Excellent salary, all expenses, pension scheme; car provided. Applications (treated in confidence) should be made in writing giving details of selling experience and remuneration earned (tabulated in order) to Sales Manager, Chen Yu, Ltd., Power Road, London, W.4. C 5680

DESPATCH FOREMAN wanted with knowledge of the drug trade and fully acquainted with the topography of London and surrounding areas, for wholesale manufacturing chemists in East London. Reply by letter stating experience and salary required to Box C 5690.

FOREMAN required by tablet manufacturing company to take charge of tableting and coating. Must have experience in both operations. Five-day week, canteen, etc. Write giving details of experience, age and salary required. Box C 5661.

GENATOSAN, LTD., of Loughborough, a member of the Fison Group, require a trade representative for a territory comprising Kent, and the East and South-east Metropolitan postal districts. A man with a real interest in selling is required, with a good personality, enthusiasm and ability. A pharmaceutical qualification or background is an advantage. This post is well remunerated and superannuated. Full personal details and summary of attainments and experience, together with a recent photograph if possible should be addressed to: The Personnel Officer, Genatosan, Ltd., 12 Derby Road, Loughborough, Leics. Please quote Ref. S/TR.2. C 5645

LEEDS AREA. Representative required by London firm, must have good knowledge of surgical instruments and hospital equipment. Previous experience essential and connections an advantage. Good salary and bonus, with car if required, for suitable applicant. Apply JGE Dept. Box C 5658.

MANUFACTURE

An excellent opening will shortly occur in South-west London for a pharmacist to take charge of manufacture.

This is a good opportunity for a keen, ambitious but reliable man aged 35-45, who has had sound general experience with a recognised drug house and in the manufacture of ointments and ethicals.

Applications should state: age, date of qualification, details of experience and salary earned to date. Replies in confidence to:—

THE MANAGING DIRECTOR,
Box C 5687

MAY & BAKER, LTD., Dagenham, Essex, require a Pharmaceutical Representative (age 24-28) for the North of England and Scotland. Applicants should be able to drive a car and prepared to work away from home at reasonable intervals. Salary, expenses and commission. Staff pension scheme. Apply initially in writing, giving full details of qualifications and experience to the Personnel Officer, quoting reference No. 317. C 5686

MEDICAL REPRESENTATIVE: Eli Lilly & Co., Ltd., invite applications from keen pharmacists under 35 years of age for the position of medical representative to contact doctors, hospitals and retail chemists in North Yorkshire and East Lancashire with headquarters in Bradford. The position is progressive and pensionable. Previous experience is not essential. Please send full particulars to Eli Lilly & Co., Ltd., Basingstoke, Hants. C 5689

REPRESENTATIVE required by manufacturing chemists (national advertisers) to cover S.W. England including Gloucester, Oxford, Hants. Must reside on territory and have first-class experience and selling ability in the chemist trade. Salary, pension scheme, expenses and bonus. Car provided. Full details in strictest confidence. Box C 5685.

AGENTS

with sound connection required to call on chemists in all parts of England and Wales on a commission basis by old established firm of Manufacturing Chemists with widely advertised lines.

Applications are invited from men with proved sales record setting out particulars of area covered and lines carried, to:

Box CD 457. L.P.E.
110 St. Martin's Lane, W.C.2

C5699

MEDICAL REPRESENTATIVES required by old-established London House to visit doctors, hospitals and chemists for Yorkshire, Northumberland, Durham and for Greater London. Applicants should be of good appearance and address, have had experience of good class pharmacy, and be possessed of a comprehensive knowledge of medical nomenclature and of pharmacology. Applications invited from men between the ages of 25 and 35. Please give details of experience, age, salary required, and when services available. Box C 158.

OWING TO REORGANISATION and expansion in their medical representative staff a well-known ethical firm invite applications for vacancies in the following areas: (1) Cheshire including N. Staffs; (2) Gloucester and N. Somerset; (3) Birmingham and district. Previous experience while desirable is not essential but a sound pharmaceutical background, good appearance and a keen urge to succeed is essential. Remuneration by salary, commission and expenses. Write, in confidence, to Box C 5618.

REPRESENTATIVE required by established house to carry an attractive and original line. Non-competitive with present lines carried. Liberal commission. Apply: Bear Hudson, Ltd., 63 Goldhawk Road, Shepherds Bush, W.12. C 4002

REPRESENTATIVE required by progressive firm manufacturing permanent waving systems to take over existing connections. Men with contacts among departmental stores preferred. Territories available: Eastern Counties and London—North of the Thames. Good prospects for live men. Salary, commission, expenses and car expenses. Apply: Nintonia, Ltd., 590 Wandsworth Road, S.W.8. C 5677

SALES REPRESENTATIVE offered salary, commission, expenses, and opportunity of substantial income. Must have established connection and experience in selling to chemists: drugs, galenicals, dressings, plaster, proprietaries and chemists' sundries. Must be car owner. Some Home Counties and London Territories vacant. Apply to Biorex Laboratories, Ltd., 47/51 Exmouth Street, E.C.1. C 4005

SALES REPRESENTATIVE required by a manufacturer of well-established branded chemists' sundries, territory: Northern England and Scotland. Applicants should be first class men with good records and not over 50. C 5676

SHARP & DOHME, LTD., Hoddesdon, Herts., require a Medical and Technical Representative for North Lancashire, calling on doctors, chemists and hospitals. Previous representative experience not essential as training will be given. Candidates should be either pharmacists, or men with a good pharmaceutical or medical background. Age not exceeding 35 years. Remuneration by way of salary, plus full expenses. Apply: Sales Manager. C 5681

TABLET COATER required by well-known manufacturing tablet makers. First-class opportunity for experienced man. Five-day week, canteen, etc. Write giving details of experience, age and salary required. Box C 5660.

TABLET MANAGER

Pharmacist with good experience required as head of Tablet Manufacturing Department. Pension scheme, 5-day week. Full details with application to Director of Laboratories, 34 Hanover Street, Liverpool, 1. C 5691

TRAVELERS wanted for all areas, including London, with established connections, to sell attractively presented and advertised line to chemists, on generous commission basis. Box C 4007.

Situations Open—Continued

WORKS CHEMIST, B.Sc. standard of education, required for control of chemical plant and processes. Applicants should have thorough grounding in organic chemistry. Applications will be considered from students completing their course this summer. Salary according to qualifications and experience. Contributory pension scheme. Five-day week. Apply initially in writing to Personnel Officer, May & Baker, Ltd., Dagenham, Essex. C 5678.

WHOLESALE (OVERSEAS)

PHARMACIST registered in Great Britain required by West African merchant house to manage the progressively increasing sales of widely known British pharmaceuticals, drugs and allied products in principally Nigeria and the Gold Coast. Commencing salary from £1,000 and more according to experience, plus a bonus on results. Low Colonial rates of income tax. Free medical attention and furnished quarters. Also passages to and from West Africa. Normal tour of duty 18 months in West Africa, after which four months U.K. leave on full pay. Selected applicant must be a good salesman preferably with wholesale experience. This appointment is pensionable and offers exceptional scope to an ambitious man willing to work hard in the tropics. Apply Box C 4008.

SITUATIONS WANTED

3/- for 18 words (min.) then 2d. per word.
Box 1/-

WHOLESALE

PARTLY disabled price or price checker drugs, ethicals, galenicals, sundries, etc., wholesale or retail, whole or part-time. Box C 4003.

REPRESENTATIVE, Aged 49 years, free now, requires situation with established company on salary, expenses, commission. Anywhere South England. 15 years' first-class selling experience with chemists, big stores, wholesalers. 19 years driving. Full knowledge of areas S.E., S.W. Not car owner. Good references. Box C 4019.

SMART REPRESENTATIVE requires change. Strong personal connection with all wholesale and retail chemists Notts, Derby, Lincs and Leicester. Excellent sales records. References. Box C 4014.

TECHNICAL PROBLEMS. Pharmacists with wide experience of manufacturing and other technical problems, offer their services as consultants. Strictest confidence assured. Box C 3989.

AGENCIES

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

AGENTS REQUIRED (all territories) by well-known firm of manufacturers of paper products. Good terms to right man. Box No. AC 81768, Samson Clarks, 57/61 Mortimer Street, London, W.1. C 157

AGENCIES WANTED, MALTA G.C. Wholesale importing firm, well-established, enjoying excellent relations with chemists and druggists solicit additional agencies direct from manufacturing firms. First-class U.K. trade references available. Apply Box C 3986.

TOILETBAGS, PURSES, WALLETS, etc. Wonderful low priced, easy selling lines for chemists, stores, etc. Agencies open for London and provinces. Liberal commission. State ground covered and references. Box C 4013.

AGENCIES WANTED

8/6 for 36 words (min.) then 3d. per word.
Box 2/-

AGENT, resident Liverpool, making regular six-weekly calls on chemists, stores, wholesalers, Lancs/Yorks to Border, with nationally advertised cosmetic range, requires other chemist line(s) on part exes and commission. 800 live a/cs. Car, phone. Box C 4012.

BUSINESS OPPORTUNITIES

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

CAPITAL. Capital, production and sales facilities are available for the development of one or more good toilet preparations or medicinal products. Only items which have already sold more than £20,000 in a recent year can be considered. Outright purchase or profit-sharing arrangements. Replies, which will be treated in the strictest confidence, should be addressed to D. R. Collins, Managing Director, Goya, Ltd., Amersham, Bucks. C 5615

MANUFACTURING CHEMISTS invite inquiries for the manufacture, packing, etc., of private formulae preparations, liquids, powders, tablets. Dispatch facilities available with own printing department. Frank Macowal & Yanatas, Ltd., Willshaw St., London, S.E.14. Tel.: Tideway 3846-8. C 122

REPUTABLE COSMETIC manufacturers are invited to negotiate for licence of successful American product. Box C 4009.

WANTED

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

BOTTLES, JARS AND CLOSURES purchased for cash, we take this opportunity of advising you that we are open to purchase all stocks of medical bottles, screw caps, gummed tapes and other packaging materials. For top prices communicate, with samples, to Noel Davold & Co., 9 Laurence Pountney Lane, Cannon St., E.C.4, Man. 3951-2. C 5444

END RUNNER MILL, with or without motor, Gardiner No. 11 (or similar) disintegrator, and Jones type cigarette making machine (for modification) wanted. Arnold, 43 Pollard Road, Morden, Surrey. Battersea 5800. C 3998

WANTED: Surplus or redundant merchandise, clearance goods of any description or discontinued lines. Cash immediately, no delay. Our representative will be pleased to call or, alternatively, please send samples with particulars, quantity and price. Lawrence Edwards & Co., Ltd., 6-7 Wellington Close, Ledbury Rd., London, W.11. Telephone: Bayswater 4020. C 140

GLYCERINE pale straw and B.P., 2 tons required. Offers to Box C 5667.

WANTED: Montan wax, fatty grey carnauba wax, 10-cwts. calcium chloride anhydrous, B.P., citric acid, B.P., pale straw and B.P. glycerine. Box C 5673.

MISCELLANEOUS SALES

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

5,000 GROSS CORKS, No. 6 Tapers. Offers invited: Phillips Chemical Co., Ltd., 179 Acton Vale, London, W.3. 'Phone: She, 4435. C 5675

2-OZ. OPAL JARS with caps, 50 gross, price 30s. per gross. Leon Davis & Co., 9 Laurence Pountney Lane, Cannon St., London, E.C.4. Mansion House 3951-2. C 5692

1½ BARRELS pure rape oil. Offers. J. H. Collins & Sons, Mansfield. C 4016

MODERN CHEMIST SHOP fittings, drug ranges, wallcases and frameless sliding doors, display counters and showcases; all styles of window fittings and display stands. D. Matthews & Son, Ltd., Complete Chemist Shop Fitters and Shop Front Builders, 14-16 Manchester St., Liverpool. C 141

NICKEL OXIDE, grey green, 75/78% Ni. free from iron. Off-colour zinc oxide: Tri-chlorethylene fully stabilised water clear and representing metal de-greasing quality. Box C 5674.

OPTICIAN! For a comprehensive prescription service try Sheaf Optical Works, Ltd., 40 South St., Sheffield. 2 (telephone: 24434). Solid and fused bifocals and rimless work a speciality. C 154

PACKAGING. Cardboard cartons, folding and rigid boxes and tubes, letterpress and litho. Packings for special purposes. Johns, Son & Watts, Ltd., 2-4 Epworth St., London, E.C.2. Telephone: Monarch 7408. C 1231

SULPHANILAMIDE TABLETS B.P. 300 tins each containing 1,000 tablets 0.5 gram, packed in 3 export cases, 9/- per tin delivered London. Apply Box C 4006.

PARTNERSHIPS

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

LONDON pharmacist required to assist in formation of new company (retail pharmacy). Excellent opportunity for ambitious man. Preferred age 28-34. Retail experience essential. Full particulars in strict confidence to Box C 4004.

PATENTS

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

THE PROPRIETOR of British Patent Nos. 576832 and 600575, entitled "Surgical splints and casts" and "Method of preparing and treating plastic fabrications" respectively, offer same for licence or otherwise to ensure practical working in Great Britain. Inquiries to Singer, Stern & Carlberg, 14 East Jackson Boulevard, Chicago 4, Illinois, U.S.A. C 5670

The C and D WEEKLY LIST OF PRICE CHANGES

A = Advanced; R = Reduced; I.R.P. = Inclusive Retail Price; * = Tax 25 per cent.; † = Tax 75 per cent.

ALLEN & HANBURY'S, LTD. (from July 6)
Eupetone bacteriological Doz. R
peptone No. 2. 4-oz. 90 0 R
16-oz. 288 0 R

DISTILLERS COMPANY (BIOCHEMICALS), LTD. (from July 13)

Distafed penicillin supplement Each I.R.P.
1 gm. per lb. 1-lb. 2 10 2 1½
10-lb. 25 0 18 9
50-lb. 108 4 81 3

Distafed riboflavine supplement

No. 1 (5,000 microgm. per lb.)
1-lb. 4 3 3 2½
10-lb. 38 4 28 9
50-lb. 175 0 131 3

No. 2 (1,000 microgm. per lb.)
1-lb. 1 10 1 4½
10-lb. 13 4 10 0
50-lb. 54 2 40 8½

Distafed vitamin B₁₂ supplement

15 microgm. per lb. 1-lb. 6 0 4 6
10-lb. 55 0 41 3
50-lb. 266 8 200 0

EVANS MEDICAL SUPPLIES, LTD. (from July 6)

Bitevan ampoules

20 microgm. per mil Each 2 7½ 3 6 R
boxes of 6 x 1 mil

50 microgm. per mil 3 9 5 0 R
boxes of 6 x 1 mil 5 3 7 0 R
10 mil vials

100 microgm. per mil 5 3 7 0 R
boxes of 6 x 1 mil 6 9 9 0 R
10 mil vials

Distivit ampoules

20 microgm. per mil 2 3 3 4½ R
boxes of 5 x 1 mil

50 microgm. per mil 3 2 4 7½ R
boxes of 5 x 1 mil

100 microgm. per mil 4 4 6 6 R
boxes of 5 x 1 mil

RODMILL CHEMICAL CO., LTD. (from July 7)

Gee's linctus pastilles, Doz. R

2-oz. tins 9 6 R

2-oz. cartons 8 0 R

1-oz. packets 4 0 R

P.A.T.A. PROTECTED LIST

GLAXO LABORATORIES, LTD. (deletions)

Flavogel jelly, Ostomalt, adsorbed types of whooping cough vaccine and diphtheria-per-

tussis prophylactic.

POND'S EXTRACT CO., LTD. (reintroduction)

Pond's extract* 10-oz. 45 0 6 0

TATTOO COSMETICS, LTD. (Agents: Fassett & Johnson, Ltd.) (from July 1)

Tattoo 5-day pad† 9 4 1 9 4
16 0 3 0 4

Tattoo face powder† 4 10 11 R

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and published by the Proprietors, MORGAN BROTHERS (PUBLISHERS), LIMITED, at 28 Essex Street, Strand, London, W.C.2.

for 1953 for the research awards granted by the Society.

The Education Committee, after considering the report of its subcommittee on three applications for the award of the Charter Travelling Scholarship for 1953, agreed with its recommendation that no award should be made for the year. The Council concurred.

Old People's Home Shelved

The Council finally decided that circumstances were not favourable to the establishment of an old people's home for pharmacists at present. It was also found that there was no satisfactory alternative way of achieving the objects of such a home. In reply to MR. F. C. WILSON, MR. E. A. BROCKLEHURST said that he shared his regret that it was not possible to proceed with the scheme. In view of the financial difficulties, alternatives had been sought but they amounted to the sharing of homes with other professional people. It had been suggested that at a later date there might be some change in the situation which would make it possible to consider the matter again. Another consideration was that an appeal for money so soon after pharmacy had responded so well to the appeal for the flood relief fund was thought to be inadvisable. It was decided that that position should be accepted.

The Council approved the final form of the Statement on Matters of Professional Conduct incorporating changes made at the Branch Representatives' meeting. It was reported that after further consideration of the decision of the annual meeting on assistants in pharmacy the Public Services Committee had decided that, as the position was one aspect of the larger question of the conditions under which pharmacy was practised and an examination of the question was desirable owing to recent changes, a memorandum should be prepared as a basis for discussion of the lines on which such an examination might be made.

The Council received an interim report of a recent meeting attended by thirty-six representatives of certain Branches to supply information upon the present state of veterinary and agricultural business in their districts to assist the Council with development of the Society's policy.

The report of the Warden of Birdsgrove House showed

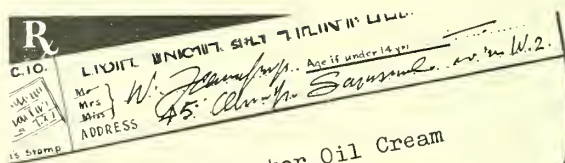
that in the month to June 16, fifty-one guests stayed at the home for an aggregate of seventy weeks (sixty-two guests and seventy-seven weeks in 1952). THE SECRETARY AND REGISTRAR reported a gift of £25 from the West Ham Association of Pharmacists to help to furnish the Cumberland Room.

A list of names of 246 pharmacists who had not paid their retention fees for the current year was submitted and it was agreed that they should be removed from the registers. It was stated that ninety-four other members who had not paid the current fee had intimated their wish to retire.

The report of the Law Committee showed that in May the Society's inspectors and agents visited 1,286 authorised sellers and 909 proprietors of drug stores and similar traders. Seven cases of alleged infringement of the Pharmacy Acts and the Penicillin Act were considered and appropriate action taken. A letter was received from the secretary of the Poisons Board on two amendments to the Poisons Rules that the Society had proposed, to strengthen control over the wholesale distribution of poisons. The letter stated that an offer by the Association of British Pharmaceutical Industry to send a further circular to the wholesale trade should be accepted in lieu of the first proposed amendment—that wholesale supplies of Part I poisons should not be sold to the owner of premises unless the premises were registered under Section 12 of the 1933 Act. The Law Committee welcomed the offer, but did not consider that it dealt satisfactorily with the matter or as effectively as the additional rule proposed by the Council. The letter also stated that as it had not been found possible to devise a workable rule in the terms suggested by the Council's second amendment—that in all establishments in which pharmaceutical preparations containing poisons are manufactured or packed for distribution all three processes must be under the supervision of a registered pharmacist or a person holding one of the qualifications referred to in Rule 30—the amendment would be abandoned. The Committee did not accept the Board's view, and agreed that further representations on both proposed amendments should be made in due course.



A COMFORTABLE SESSION IN THE COUNCIL CHAMBER (See also p. 38.)



R/ Zinc & Castor Oil Cream
B.P. 1953
Packed in 1 oz., 2 oz.
& 4 oz. Jars.

R/ Calamine Lotion
B.P. 1953.
Packed in 4 oz. Fancy Bottle.
Sample sent on request.

B.P. 1953 Revised Formulas

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For the relief of Sunburn, Chafing and Midge Bites. The ANTIVIRAY enables this product to be used prior to exposure to the sun's rays.

Packed in 4 oz. W.M. Bottle.

Operation of Quantity Discount Prices. The prices shown under the various quantity headings can be taken for that product in any combination of sizes. Terms: less 2½% 14 days. Free delivery VAN area.

		Quantity Discount Prices.				
		Zinc and Castor Oil Cream B.P. 1953.				
Free from P.T.	List	3 doz.	6 doz.	12 doz.	24 doz.	60 doz.
1 oz. Jars	6/-	—	5/9	5/6	5/3	5/-
2 oz. Jars	9/-	—	8/9	8/6	8/3	8/-
4 oz. Jars	14/3	—	13/9	13/3	12/9	12/3
Calamine Lotion B.P. 1953.		Free from P.T.				
4 oz. Bottles	8/-	—	7/6	7/3	7/-	6/9
Cream of Calamine (Skuse) (Antiseptic)						
4 oz. Bottles	13/-	12/6	12/-	11/6	—	—
P.T. chargeable at 3/1 doz.						

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INFORMATION WANTED

The Editor would appreciate information about suppliers of the following items:

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LANACALOL CREME
ZIPPA label scraper



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TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

Research and Economic Policy

THE statement made by Mr. H. C. H. Graves in his annual report as chairman of Vitamins, Ltd. (p. 38) that fewer research workers are today employed in Great Britain's pharmaceutical industry than by a single typical American pharmaceutical house is disquieting. Even more deplorable is the fact that the present official attitude towards the industry is already causing some manufacturers to reduce still further the number of workers engaged in research. Constant criticism of the cost of proprietary medicines, mostly without thought of what the alternative would be, is at last having its inevitable effect of striking at the very roots of progress. While that is happening overseas manufacturers, who set their prices for specialities at levels to cover amply the costs of research, find themselves economically able also to conduct the medical propaganda to maintain sales. The more they practise that policy the more entrenched becomes their position in face of British competition and the greater the possibility that other British manufacturers may have less to spend on research. Mr. Graves has certainly a point in his remark that nothing is said of hospitals' spending £32 in other ways for every £1 they spend on drugs. The explanation is that the other expenditure is "financially controlled," whereas the £1 is reprehensibly spent because the Minister is not in control of the spending. There is the further threat to the industry of being nationalised, at least in part. With those clouds in its sky, coupled with the decision by the Government to investigate the costing of certain medicines, can the industry be blamed for the pessimism that leads to cuts in research programmes? It would indeed be criminal if official policy reduced the industry to "an impotent imitator of American, German and Swiss work" and if its hard-won export markets were to be lost. In a survey of the British economy published to commemorate the 20,000th issue of the *Financial Times*, Mr. C. G. Hayman (chairman, Association of British Chemical Manufacturers) points to another aspect of the matter. Costs of new plant installations are now so great, he says, that only by extensive research can unwarranted financial risks be avoided. The burden of his remarks is that the industry could do much to improve the well-being of mankind, and that the national purpose were best served by permitting it the utmost freedom of enterprise and giving it every encouragement. The Departments concerned should take note of these very strongly held objections to certain current policies.

"Strategic" Drugs

INTO political aspects of the question dealt with by correspondents A. H. Snereb (*C. & D.*, June 27, p. 691) and W. Fletcher (*C. & D.*, July 4, p. 14) we have no wish to enter, but the matter is perhaps not quite so simple and straightforward as their letters might suggest, even accepting the general principle that civilian populations should not be penalised by prohibitions belligerents may place on the exports of strategic materials by their own nationals. The matter is certainly not one on which the organised manufacturers (the Association of British Pharmaceutical Industry rather than, as Mr. Fletcher suggested, the Association of British Chemical Manufacturers) have been inactive, lacking in awareness, or blindly consenting. In the House of Commons in April 1952, Colonel Tilney referred to correspondence between the A.B.P.I. and the Government of Hong Kong and added: "On humanitarian grounds no one wishes to cut off their supplies." A year later Mr. P. Thorneycroft was stating in the House on behalf of the Government that pharmaceuticals were not subject to the embargo which the United Kingdom had maintained on certain exports to China, but that, since August 1951, exports to that country of certain pharmaceuticals [antibiotics, antimalarials and sulphonamides] had been limited to estimated normal civilian requirements. Mr. Thorneycroft admitted on June 18 that "of all the controls that were forced upon us by aggression in Korea the control of drugs which can be used for the relief of suffering is among the most distasteful." The answer to the question whether antibiotics are strategic material is relative rather than absolute. If the North Atlantic Treaty Organisation regards them as strategic, Britain has to decide whether to concur or object. Till now she has chosen to concur, and every citizen must decide for himself whether the choice was right or wrong. The anomaly till recently was that other N.A.T.O. countries were less meticulous than Britain, with results that tended to render her stand nugatory. Paradoxically, those results have, at the same time, destroyed much of the foundation for arguments based on civilian populations being denied vital drugs. The prime need of the moment would appear to be full uniformity of thought and action among N.A.T.O. countries.

Pharmacists and Veterinarians

SOME of the recent interest taken by country chemists in measures to safeguard their veterinary business, and especially the proposal—for the time being postponed—to form an association of veterinary chemists, has been noted by veterinary surgeons, with the result that several letters on the subject have appeared in the *Veterinary Record*. In view of the small amount of concrete information that could have reached the writers of those letters, it is hardly surprising that some of them seem prompted by fear of encroachment on the proper territory of veterinarians. To dispel any such misconceptions no better communication could have been prepared than has been sent by Mr. A. E. Moss, Shrewsbury, on behalf of pharmacists, to the editor of that weekly. Mr. Moss points out that the promoters of the action on behalf of chemists described themselves as veterinary pharmacists in order to distinguish between those chemists who try to cater for the che-

mical requirements of the agricultural industry and the majority of pharmacists who do not. "The point is that we are a minority within our own profession, having interests and difficulties not shared by the urban chemist." Pharmacists, Mr. Moss point out, require no further authority to sell pharmaceuticals—whether for human or veterinary use. They have responsibilities, both legal and professional, but cannot permit those responsibilities to be assumed by members of another profession or by commercial undertakings. To take that line, however, is not to propose treating or diagnosing animal diseases. The responsibility of the veterinary surgeon in that sphere is fully recognised. Nor is there any desire to spoil the good relationship between the farmer and the veterinary surgeon. Chemists are accustomed to working in harmony with members of related professions and that co-operation is generally regarded as being in the best interests of the patient. Moreover, there are aspects of veterinary pharmacy that do not concern the veterinarian, such as the competition by animal medicine manufacturers who in some cases call themselves veterinary chemists yet have no registered pharmacist on the board. The real problem is to determine the rôle veterinary pharmacy is to take in assisting agriculture to meet the demands of a growing world population. There is surely some common level on which mutual understanding and co-operation can be achieved between veterinarian and pharmacist. With that conclusion we are in entire agreement and we are confident that the point will find acceptance among *Veterinary Record* readers.

Congestion at the Council Table

WITH traditional Welsh eloquence, in which listeners detected a note of pathos, Mr. Gwilym Hughes pleaded at the July meeting of the Pharmaceutical Society's Council for something to be done to ease the accommodation situation in the Council chamber. He drew attention to the fact that, had it not been for two vacant places (due to the absences of Messrs. Meldrum and Macfarlane), it would not have been possible for Wales to be represented in its proper place. For such a thing to happen, he urged, would indeed be a tragedy. Mr. Hughes recalled that the possibility of securing more room round the Council table had been discussed two years ago, but any suggestions made then would appear to have been shelved and forgotten. "It is now my purpose," thundered Mr. Hughes, "to bring the matter to light." In the ensuing discussion suggestions were made that the president might be moved from his place of isolation at the end of a peninsular, as it were, to a more convenient spot on the mainland, and that members of the Council might consider taking Dexedrine tablets. Whilst the Council pondered the two suggestions, Mr. Granville Shaw, speaking as the former chairman of the Committee which dealt with such matters, pointed out that the question had been considered, and that it had been decided to remove the excrescences at the end of the table and substitute therefor a structure. Patterns had actually been drawn up and tried out, in his view successfully, but from that point the whole enterprise appeared to be shrouded in mystery, for the work had not been carried out. Mr. Wilson suggested that the reason was the shortage of suitable timber, but that did not satisfy Mr. Hudson, who said he could see no reason for any

difficulty and thought it only required the right sort of guidance. Whatever might be the reason, it was obvious that the plea of Mr. Hughes, made *ab imo pectore*, could not go unheeded, otherwise certain members of the Council who were, perhaps, occupying unfortunate positions from the geographical point of view might in the future find themselves addressing the Council from the passage outside.

Jet Injection as the Method of Choice

IN the administration of radioisotopes, whether in diagnosis or treatment, absorption of the injected isotope at a uniform rate is regarded as of paramount importance. A hypodermic needle has, from that aspect, the disadvantage that it probably forms an irregularly shaped pool of the solution injected, from which it may be absorbed neither uniformly nor speedily. Accordingly, in injections reported on by the American workers Bauer, Cassen, Youtcheff and Shoop, and commented on in the *Journal of the American Medical Association* (1953.1.532), resort was had to the jet-injection method, using the Hypospray (see *C. & D.*, June 6, p. 610). The rate of disappearance into the system of the injected material, as measured by a wide-angle scintillation counter, was found to be at once faster and more uniform than under administration by hypodermic syringe. In fact, the findings lend considerable support to the claims made for the Hypospray that it causes the solution administered to penetrate widely into the tissues about an inch below the surface, with the result that no appreciable pool is formed. In radioactive studies the method has the additional advantages of reducing the possibility of contamination through leakage, making more simple the shielding that is necessary to reduce radiation hazards to the operator, and probably also of reducing local irradiation effects resulting from local concentration of the material before dispersal.

Onward from Galen

A CURRENT CAUSERIE

THE centenary of the abolition of tax on soap in the first Budget of Mr. W. E. Gladstone on July 5, 1853, was celebrated in the unveiling on July 3 of a sign bearing the Gladstone arms outside the Gladstone hall at Port Sunlight by the former prime-minister's grandson. An exhibition concerned with the history of soap taxation is being held in the village library. Is it too much to hope that the reminder of that piece of Gladstonian reform may stimulate the present powers-that-be to reform likewise (and with safeguards to retailers) the contemporary tax that is levied on certain forms of soap?



A GOOD example of the "new look" which some companies are giving nowadays to their annual reports and accounts is the 28-page booklet, printed in black and green, that embodies the report for the year ended March 31 of Vitamins, Ltd., which was circulated on July 3. Apart from presenting the figures in a way that brings home their essential meaning to shareholders possibly little versed in accountancy, the booklet provides a convenient platform for the views of the company's chairman (see p. 37) on matters of current policy affecting both his own company and the industry in general, and is judiciously illustrated in a way that can hardly fail to engender a feeling of pride in those who have money invested in the concern, or who work for it. Yet there is nothing about the production to suggest unnecessary expenditure or excessive profit margins.

July 11 is the 350th anniversary of the birth of SIR KENELM DIGBY,

whose "powder of sympathy" was the miracle drug of the seventeenth century

By T. H. BISHOP, F.R.S.A.

IF Sir Kenelm Digby's "powder of sympathy" had possessed the properties attributed to it, the term "miracle drug" beloved of the lay Press, would, for once, have been justified.

One of the most colourful figures in a troubled but romantic age, Digby was born on July 11, 1603. In 1606 his father, Sir Everard Digby, was executed for his part in the Gunpowder Plot, but that unhappy circumstance did not prevent Kenelm from succeeding to large estates. After leaving Oxford without matriculating, but with a fondness for dabbling in chemical and alchemical experiments, Digby travelled widely. Returning in 1623 from a trip through France, Italy, and Spain he was knighted by James I, and in his book *Of the Cure of Wounds by the Powder of Sympathy*, 1658, Digby tells how his knight-hood almost brought him serious injury. James I could not bear the sight of naked steel, and in the act of touching Digby on the shoulder averted his gaze. But for the intervention of the Duke of Buckingham, who guided the king's hand, the sword would have entered Digby's eye.

In 1625 Digby married the beautiful Venetia Stanley, a lady whose reputation was assailed by the gossips, but whose conduct, from the time of her marriage at any rate, was beyond reproach. While in France, Digby had been involved in a curious episode with Marie de Medici, Queen Regent of France. They met in Angers, where Digby sought refuge from the plague then rife in Paris, and where the Queen had retreated during the struggle for power with her son, Louis XIII. The Queen made immodest advances to the handsome boy, who took to flight and attempted to save himself from further embarrassment by causing his servants to circulate a story that he had been killed in a fight between the rival factions. Digby won considerable fame by a naval victory at Scanderoon, the modern Alexandretta, in 1628, when he was in command of a privateering expedition, and in 1630 was made a Commissioner for the Navy. His path in religion and in politics was tortuous, but he was by no means the only Englishman who found it necessary to tread warily in those intolerant days.

Exile

At the beginning of the Civil War he was imprisoned for a while by the Parliamentarians. It is interesting to read that, when troubled with stone during that period,

he asked a friend to send him directions for making a tincture of strawberries, a remedy which he had found effective on previous occasions. Released in 1643 on condition that he left England, Digby settled in France, and in 1644 published two works which indicated his sympathy with the spirit of inquiry then afoot. His two treatises, "Of Bodies" and "Of Man's Soul" were a brave attempt to offer a rational explanation of the operations of nature. Digby returned to England in 1649, only to be banished again in the same year. In 1651 John Evelyn visited him in Paris, and under the date November 7, 1651, the diarist records:—

"I visited Sr Kenelm Digby, with whom I had much discourse of chymicall matters. I shew'd him a particular way of extracting oyle of sulphur, and he gave me a certain powder with which he affirm'd that he had fixed γ (mercury) before the late King; he advis'd me to try and digest a little better, and gave me a water which he said was onely raine water of the autumnal equinox exceedingly rectified, very volatile; it had a taste of a strong vitrioliq, and smelt like aqua fortis. He intended it for a dissolvent of calx of gold; but the truth is, Sir Kenelm was an errant mountebank."



Sir Kenelm Digby

From an engraving by Vandyck

Powder of Sympathy

In 1658 Digby delivered a discourse on the powder of sympathy at Montpellier.

Sympathetic magic has a very ancient history, and the subject was dealt with at some length by Sir James Frazer in the *Golden Bough*. Pliny wrote "If any person shall be sorry for a blow he has given another, afar off or near at hand, if he shall presently spit into the middle of the hand with which he gave the blow, the party that was smitten shall presently be free from pain." It is worth noting that one of Digby's critics called him the "Pliny of his age for lying." Paracelsus (1493-1541) is known for his rejection of ancient beliefs in medicine, but even he sponsored a weapon salve by which wounds could be cured by treating the instrument which had inflicted them instead of the affected parts. His salve contained boar's and bear's fat, powdered burnt worms, dried boar's brain, red sandal wood, and mummy from the skull of a man who had died a violent death.

In his book on the sympathetic powder Digby gives the following instance of its remarkable powers. A gentleman came to him some four or five days after his hand had been cut to the bone while he was trying to part two friends who were engaged in a duel. The wounded man said his sur-

geons wished to amputate the hand as they feared gangrene. He was in great pain and the wound much inflamed. Digby asked him for any article that had the blood upon it, and was given a garter which had been used to bind the wound. This he placed in a basin into which he had dissolved a handful of powder of vitriol. Digby presently observed that the wounded man, who was talking with a friend in a corner of the room, gave a sudden start. On being questioned, he replied "I know not what ails me, but I find that I feel no more pain; methinks that a pleasing kind of freshness, as if a wet cold napkin did spread over my hand, has taken away the inflammation." Digby instructed him to throw away the plasters he had been using, to keep the wound clean, and "in a moderate temper between heat and cold."

Later on, Digby took the garter out of the basin, and put it before the fire to dry. Scarcely had it dried before the patient's servant came to say that his master's hand felt as though it were between coals of fire. Digby assured him that he knew the reason for this and would take steps to ease the inflammation. He returned the garter to the water, and when the servant reached his master he found him already free from pain. The King asked Digby for some of this marvellous powder "whereupon His Majesty made sundry proofs, whence he received singular satisfaction."

Samuel Butler referred to sympathetic powder and weapon salves in *Hudibras* :—

"For by his side a pouch he wore
Replete with strange hermetick powder
That wounds nine miles point blank would solder,
By skilful chemist at great cost
Extracted from a rotten post."

and:—

"'Tis true a scorpion's oil is said
To cure the wounds the vermin made;
And weapons dress'd with salves restore
And heal the wounds they made before."

A contemporary of Digby, the antiquarian Anthony Wood (1632-95) described him thus:—"He was not only master of a good, graceful and judicious style, but also wrote an admirable hand both fast and Roman. His person was handsome and gigantic, and nothing was wanting to make him a complete Cavalier. He had so graceful elocution and noble address, that had he been dropped from the clouds into any part of the world, he would have made himself respected."

Sir Kenelm was theologian, metaphysician, and man of action. While in France he fought and killed a French Lord who had insulted Charles I. In 1633 Digby's wife died. He was heartbroken, but that did not stop malicious tongues from wagging. It was said that Digby had killed his wife by giving her "viper wine" administered as a potion to restore her beauty. John Aubrey, the antiquarian and biographer, wrote:—

"After her death, to avoyd envy and scandall, he retired in to Gresham-colledge at London, where he diverted himselfe with his Chymistry, and the Professors' good conversation. He wore there a long mourning cloake, a high crowned hatt, his beard unshorne, look't like a Hermite, as signs of sorrowe for his beloved wife. . . ."

Gresham College became the first home of the Royal Society, of which Digby was an original member. He died on July 11, 1665, at his lodgings in Covent Garden. It is impossible to say whether he believed all the strange things he said and wrote, but there is no doubt that his dabbings enliven the pages of chemical history.

CORRESPONDENCE

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

DISPENSING FIGURES

SIR,—Recent Press reports credit chemists with having dispensed some 1,000 million prescriptions since the inception of the Health Service. Apparently the fact that approximately 50 per cent. of the national dispensing is compounded by so-called "unqualified dispensers" has escaped the attention of the Ministry! Misleading statements such as this do nothing to improve relations between pharmacists and their "unqualified dispensers." Total disregard of the latter—a large, efficient, and most loyal body of workers—will not contribute towards a solution of what is probably the most controversial issue in pharmacy today—namely recognition of the "unqualified assistant."

BIRMINGHAM

L. L. JAMES

DINNER TO OVERSEAS PHARMACISTS

SIR,—The London branch of the Guild of Public Pharmacists will be entertaining to dinner the hospital pharmacists from overseas attending the British Pharmaceutical Conference. The dinner will be held at Westminster Hospital Medical School, Wednesday, September 2 (informal dress). It is hoped that as many British hospital pharmacists as possible will participate to help in entertaining our guests. The cost of the dinner will not exceed 10s. 6d. per head (exclusive of wines) and is not limited to pharmacists attending the conference. However, the maximum capacity of the refectory is ninety, and it may prove impossible to accept all the applications. They will be dealt with in order of receipt. I should be glad to hear as early as possible from those who wish to attend.

WESTMINSTER HOSPITAL, HERBERT S. GRAINGER
LONDON, S.W.1

VETERINARY PHARMACY

SIR,—I wish to record my appreciation of all those who have taken the initiative in attempting to re-establish veterinary pharmacy. Not least deserving of thanks is THE CHEMIST AND DRUGGIST itself. There is, however, an omin-

ous note in the reports of the proceedings to date. Preparations, the supply of which is governed by Acts of Parliament, are on the increase, and the proportion of them used will continue to grow. Various antibiotics, the sulphonamides and new synthetic chemicals can generally be supplied only on prescriptions of veterinary surgeons. As the veterinarians stock and sell them, there are likely to be very few prescriptions! Until the veterinarians become truly professional people, they will continue to be the main stockists. Only if the farmers feel that they can achieve more economical services through the chemist can we seek their aid to effect some change. Unless we can rally the National Farmers' Union to fight the legal monopoly of the veterinary profession, I doubt if our exertions will achieve much.

KELSALL, CHES.

S. D. LITTLEWOOD

PRICES AND PROFIT

SIR,—I have recently received a circular letter from a well-known firm (claiming to be the first on the C.F. list) giving details of new prices for two of their products. The letter also states that (1) "Your customers will appreciate our packing"; (2) "Your profit as you see is very attractive." Let us examine this "very attractive profit" by comparing the following computations on a standard pack.

	Trade	Tax	Retail	Profit margin
Former Price per unit ...	10	2½	1 5	4½
New Attractive Price ...	1 1	3½	1 9	4½

The increase in profit is therefore precisely one farthing. Taking advantage of "display terms" will, of course, slightly increase the margin of profit. My customers couldn't care less about the packing, but have plenty to say about the exorbitant price increase. One can, therefore, fully agree with a further point in the circular letter—"money stays at home." It certainly does—but not to the advantage of the chemist.

LONDON, S.E.5

FRANK J. BREAN

ESSENTIALS OF TREATMENT

A C. & D. "post graduate" course for pharmacists

DEALING SPECIALLY WITH THE PHYSIOLOGICAL AND PHARMACOLOGICAL PRINCIPLES INVOLVED

BY A MEDICAL MAN

14. TONICS AND HOLIDAYS

HOW often does one hear the expression "You need a good tonic" or "You need a good holiday"! What part, in fact, do tonics and holidays play in medical treatment? At this time of the year it is not inappropriate to consider the rôle of rest and relaxation in relation to health. A definition of good health must, of course, be given if the discussion is to be objective and scientific, but the definition is difficult to make. It cannot be determined by ordinary and accepted measurements, and a description in other vague terms such as "a state of physical and mental well-being" is unavoidable. That leaves one no nearer a true understanding, except that to be mentally composed has been established as being as essential to good health as the absence of organic disease. It is important to realise this truth because often, when one hears of a patient needing a holiday or a tonic, it is quite apparent that organic disease is absent. It may be difficult sometimes to convince the patient of that fact but it is none the less obvious that a holiday is needed. Having had the holiday, the patient's general outlook is improved and he no longer believes that he suffers from organic disease. The medical opinion is thereby vindicated and the confidence of the patient in his medical adviser is enhanced.

Tonics and their Effects

It is not disputed that tonics have a part to play in medical practice, but it is difficult to determine what in fact their properties are. Morphine may be administered to a patient with the certainty that it will have an analgesic effect dependent upon the dose given. The effect of a tonic, however, may vary from no response, or even a negative response, to a positive one out of all proportion to the medicaments presented in the tonic. To say that any particular tonic "restores your lost energy" or words to that effect cannot, therefore, be proven on scientific grounds. No one has been able to prove that a measured dose of any particular tonic increases the potential energy of any patient by any definite number of ergs other than those provided by the calories contained in the carbohydrates, fat or protein of the preparation. In all probability those constituents are in the basis, for which no therapeutic claims are made!

What are the popular constituents of tonics and what are their pharmaceutical properties? The special qualities of glycerophosphates are an exploded myth, and few believe that phosphates have any special value in the regeneration of nervous tissues. The properties of vitamins are well known, and it is difficult to believe that vitamins A and D have any value other than to counteract an actual or potential deficiency of vitamins A and D. The vitamin-B complex has certain functions associated with carbohydrate metabolism, respiration and the nervous system. The position, so far as this group of vitamins is concerned, is uncertain. There is little or no evidence of a generalised vitamin-B deficiency among an average civilised community. But the vitamin-B position is not yet fully understood, and one can only say that the case is "not proven" either way. Iron is of value in counteracting secondary anæmias, and if the poor condition or lassitude of the patient is due to an undiscovered

iron-deficiency anæmia, the patient is really receiving anti-anæmia treatment rather than a tonic. Iron salts also have a sharp taste and the significance of this factor will be explained later. Strychnine is a stimulant of the central nervous system and has the pharmacological property of reducing the resistance, which nervous impulses encounter at the synapses. It is doubtful, however, if the dose of strychnine normally included in a tonic has any significant effect in reducing the resistance at the synapse. Strychnine is also intensely bitter and sharp to the taste. Quassia and gentian are bitters and are given for that reason. Valerian, the bromides and the barbiturates are all sedatives, and their properties may be expected to be opposite to those of strychnine.

Apéritifs

Considering the drugs used, it can only be concluded that, if the value of a tonic depends upon the known pharmacological properties of its constituents, the essential features are produced by an effect on the nervous system and by the results of bitters. Dealing with the latter aspect first, acid or bitter substances, when given by mouth, have the effect of an *apéritif*. They stimulate the gastric secretion and the desire for food. On theoretical grounds, if not also on practical, they should therefore be given before meals, and that is frequently the direction given. The patient eats more food and enjoys it. If he has had an illness or has not been eating sufficient prior to taking the tonic, it is reasonable to assume that some tissue breakdown has occurred and that the increased food consumption accelerates repair, quite apart from the mental stimulus of being well fed. The administration of bitters is, therefore, logical tonic therapy, even if the final benefit derives indirectly from an increased food intake rather than from a direct effect of the drug. The status of drugs affecting the nervous system is a little more obscure. Let it be admitted that nervous tissue may take longer to regenerate after damage, and let it be admitted also that nervous tissue is more susceptible to a lack of oxygen than are other tissues. Is there any evidence to suggest that, after an illness, the damage to the nervous system is so much more marked that treatment directed at other tissues can be ignored? When a patient is tired or exhausted, matters are not remedied by increasing exercise and work. One rests. Is it logical, therefore, to apply a stimulus and increase the work or at any rate decrease the rest of the nervous tissue by giving stimulants such as strychnine? Such a procedure can only enhance the exhaustion, and the fact that that does not occur in practice may be accounted for on the assumption that the dose is too small to have much central effect. The main effect of strychnine in a tonic is, therefore, that of a bitter, and any increased strain its administration places upon the nervous system is neutralised by the improvement in general nutrition. To give a sedative such as a bromide in a tonic is a contradiction in terms, because a tonic implies stimulation rather than sedation. In the majority of cases, however, where a tonic is indicated sedation would appear to be the therapy of choice.

Let it be assumed that, in the majority of cases, the beneficial effect of a tonic is not to be found in the pharmacological properties of the medicaments it contains, and there can only be one answer to the value of those medicines, namely, psychology. What is the basis of the psychological effect? Ever since man has had the power to exercise his mind, he has been subject to mystical beliefs, and not the least of them has been the belief that certain plants, animals and other factors possess magical properties of value to mankind. The actual plant or animal, as well as the mode of action, may have changed with the passage of time, but in the main the fundamental belief in beneficial properties remains. That belief is essential if the tonic is to have any psychological effect. With that fact accepted, the value of a tonic can be explained by the conditions under which it is taken. The mere fact that a patient agrees to take a tonic signifies that he is, or believes he is, "out of sorts" and further that he is prepared to take steps to bring himself back to full health. Patients in that state of mind are usually recovering from an acute illness or may have been obsessed with acute anxieties or have been overworking. All those conditions are temporary and in all of them the prognosis is one of recovery, even if nothing is done. Match the inevitable recovery against a belief in the value of a tonic, and the answer is not only recovery, but a still firmer belief in the value of a tonic. Physical recovery probably takes place before the mental factors assume normality and thus final and complete recovery occurs at some indeterminable psychological point.

In recent years no radical changes have taken place in the composition of popular tonics. The flavours may have changed but the literature concerning the proprietary tonics is still concerned with vague symptoms, most of which are ill-defined or incapable of definition. Amphetamine and its derivatives have appeared. They have a definite central stimulating effect but are hardly tonics, their action depending too much upon borrowing against future reserves. One of the striking features of modern times is the increased interest, both medical and lay, which is displayed in holidays, rest and relaxation. There has been an increase in the number and usage of convalescent homes, which in effect merely provide a holiday following illness. There has been a progressive decrease in the hours of work, and a rise in the number and length of holidays with pay.

"New-fangled Nonsense" ?

"In my young days we had no holidays, we worked long hours and there was none of this new-fangled nonsense of annual holidays and early closing. The present generation is work-shy." What is the truth of talk like that? First, it is not always possible to make comparisons. It is probably not possible to manufacture pills at the same rate as tablets. There is no virtue in producing pills because they require more manual effort than tablets. If tablets produce the same or better results than pills, then it is in the interest of all to produce tablets; and that is what has happened during the past generation or two. More accurate, more effective medicines have been provided for the patient, and as a side-effect they have been produced with less effort. The "pill puncher" has become the tablet maker and, as part of the bargain, he has gained more leisure. The same may be said of many occupations. It is not the work involved that matters most to the community. What matters is productivity. Quality must also always be a factor.

The past century has seen a great increase in productivity and mass production. It has also seen great simplifications in a large number of processes. In many cases that simplification has removed part of the interest of the job and in almost every case it has speeded up or intensified the work. The effect of the last two factors has been to increase the incidence of boredom and to make the worker physically tired more quickly. The results of those factors can be seen in methods of factory management and in legislation and the action of trades unions.

It might be thought that a physically and mentally tired person is a suitable candidate for a tonic, and no doubt modern conditions, coupled with advertising, can explain in part the increased consumption of tonics today. Legislation and factory management appear, however, to have been activated by the view that tonics can only be regarded as a temporary expedient, not removing the fundamental cause. It has been shown that, when working hours are more than about fifty a week, or when workers carry on for more than four to five hours without a break, accident and sickness rates rise and total productivity falls. There is in that an identity of interest between employers and employees, and so legislation to prevent the occurrence of those evils is unopposed. Efforts are made to relieve the monotony of some jobs by frequent breaks and the introduction of items such as music ("while you work"). The provision of bonuses and fostering of "the team spirit" are also designed to increase production and maintain interest in work. None of those factors, however, can replace the old interest of a craftsman in his job, and it is inevitable in present-day conditions that the number of cases in which a tonic is indicated should increase.

The only method of diminishing the incidence of fatigue and boredom is to provide some other interest and to increase relaxation; but there is no point in providing relaxation unless the person has the mental aptitude to enjoy it. That explains the great increase in adult education, particularly in the arts and handicrafts. Increased leisure and the power to enjoy it are likely to reduce the demand for tonics. The far more people who now enjoy an annual holiday will come to realise that the proper use of leisure can produce the same results as time off from work and a tonic. Furthermore, now that the majority of medical certificates are tabulated and filed by one authority (the Ministry of National Insurance), the true incidence and cost to the community of "nervous debility" and allied conditions is becoming appreciated. The cost cannot be anything but considerable, and it will come as no surprise to some that active measures should be taken to reduce it. Those measures, in the main, will consist, not of interference with benefit payments, but much more probably of increased holidays and educational measures. There is no doubt that the majority of cases do suffer from some degree of mental or physical exhaustion. A review might also be made of the present holiday system, in which the annual holiday seems to be tied to juvenile education, and some modification of the five-day week may also be expected. The prospect is admirable for relaxation and in most cases for production, but relaxation loses much of its benefit when there is a mad rush for all entertainments and travel on a Saturday. It may be argued that those matters are political and to a certain extent they are; but in the past, when the only method of removing a health hazard has been political, the medical profession has not hesitated to enter the political arena. Nervous debility may not endanger lives, but it is probably as important economically to the community today as smallpox was to the people living two hundred years ago.

DIGITALIS

*WHO would think
To see the foxglove
In the hedgerow and the woods.
Who would think
To watch the bees,
Entering its honeyed flowers,
That within it
Was a poison
Helpful to the hearts of men
With the glycosides extracted
From the leaves of Purpurea
And her cousin
Called Lanata.*

HERBERT A. BERENS

A HISTORY OF PHARMACY AT UNIVERSITY COLLEGE HOSPITAL

By T. D. WHITTET, B.Sc., Ph.C., A.R.I.C., D.B.A.

(Concluded from THE CHEMIST AND DRUGGIST, July 4, p. 17).

In 1934, Harold Davis read at the Leeds meeting of the British Pharmaceutical Conference a paper—"The Preparation of Sterile Solutions I." In it he showed that steaming at 100° C. for one hour was an unsatisfactory method of sterilising many injections and also pointed out the fallacy of applying the tyndallisation process to injection solutions. In the following year he presented to the Belfast Conference the second paper in the series, which was read by Dr. Hampshire in his absence. The paper showed the action of solutions of many common medicaments on *Staphylococcus aureus*, and the germicidal effect of common preservatives. Davis was the first person to suggest—in that paper—the use of para-chloro-meta-cresol (chlorocresol) as a preservative for parenteral injections. That led to the development of "heating with a bactericide" which is still one of the official methods of sterilisation in the 1953 B.P. At the same Conference, with Professor H. Berry, he presented a paper comparing the merits of maceration and percolation as methods of preparing tincture of digitalis. The results of that work are seen in the official monographs of the present Pharmacopœia. Later in the same year Davis published a paper on the preparation and preservation of morphine injection and one of the formulas he suggested was adopted for the 1948 B.P.

Thesis on Tyndallisation

In his work for his doctorate Davis developed the surface viable-count method of enumerating bacteria, and in 1939 was awarded a Doctorate of Philosophy in non-clinical medicine. Parts of his thesis were later published as "A Quantitative Investigation of the Tyndallisation Process" and "The Effect on Bacteria of Substances in Use for the Preparation of Solutions for Parenteral Administration." Shortly after that Davis became a recognised teacher of London University and a member of the Board of Studies in Pharmacy. He became an examiner for the Universities of London, Manchester and Wales as well as being on the Society's board of examiners since 1929.

During the war years Dr. Davis was kept very busy with various Ministry of Health Committees, including the Therapeutic Requirements Committee, but he still found time to publish a note on the sterilisation of sulphanilamide and to take part in the early development of the pharmacy of penicillin. He was also responsible for the revision of Bentley's "Textbook of Pharmaceutics" published in 1948. Besides teaching and research, Dr. Davis took part in several activities of the Hospital and Medical School. He was a member of the medical-school committee and played golf for the medical-school team. He was also prominent in the photographic club and, with Mr. Newman, ran the photographic department during the war. Outside the hospital he was a member of several B.P. and B.P.C. committees, and was for a time president of the Guild of Public Pharmacists. In 1952 he was elected treasurer of the British Pharmaceutical Conference.

In 1947 Dr. Davis was appointed Chief Pharmacist to the Ministry of Health, and in that capacity is playing an important part in the organisation of the pharmaceutical services in the National Health Service.

Research since 1947

Since 1947 papers published from the department include monographs on the stability of adrenaline, ammonium bicarbonate, morphine sulphate and the sulphonamides, and identity tests for absorbable hæmostatics and other surgical dressings. It is interesting to note that the formula for injection of morphine, suggested in the paper just mentioned, has been adopted in the 1953 B.P., thus following the earlier work of Martindale and Davis on this subject.

Other U.C.H. Pharmacists

Former assistant pharmacists at U.C.H. have become chief pharmacists at several important hospitals, including some of the teaching hospitals. Among other interesting personalities who have been assistants in the department are W. G. U. Woolcock and H. Berry. The former left U.C.H. to become secretary to the British Pharmaceutical Codex Committee and eventually secretary of the Pharmaceutical Society. He was a Coalition Liberal Member of Parliament from 1918 until 1922, holding several parliamentary secretaryships. He was made a C.B.E. in 1920 and a C.M.G. in 1933. He died in 1947 at the age of sixty-nine.

H. Berry was employed as assistant pharmacist for some time just after the 1914-18 war. He later became head of the pharmacy department, Birmingham Central Technical College, and eventually Professor of Pharmaceutics and Dean of the School of Pharmacy of London University, a post he still holds. He is also a member of the Pharmacopœia Commission and a past-chairman of the British Pharmaceutical Conference.

University College Hospital Pharmacopœia

The Hospital has had its own pharmacopœia since 1846, and something of the history of therapeutics over the past hundred years can be learned from looking through the various editions. Copies of each are still kept in the pharmacy. The first few were slim volumes, containing mixtures made from mineral and vegetable drugs which have been in use for many centuries. Some of them are now obsolete but others survive even to the present edition, e.g. mist. catechu and mist. gent. acid.

The edition of 1846 was all in Latin, but by 1867 only the titles of preparations were in that language, the ingredients and directions being in English. Our copy of the 1867 edition is interesting, since it contains the minutes of a dispensing committee of May 26, 1868, at which Dr. Sydney Ringer and Dr. T. Hillier, former apothecaries, were present.

The edition of 1873 was edited by William Martindale. It included the metric equivalents of all quantities of drugs, a practice which has been continued ever since. The editions of 1873 and 1891 were edited by A. W. Gerrard, and those of 1899 and 1904 by Harold Wilson. The first injectable solutions appeared in the edition of 1907, edited by R. R. Bennett. It is interesting to note that, as early as that date, the injections were directed to be sterilised by boiling, whereas it was not until 1932 that the British Pharmacopœia included any directions for sterilising injections. The injections mentioned in the U.C.H. Pharma-

copœia, 1907, were those of glucose, glucose saline, normal saline and the synthetic local anæsthetic eucaine. That was the first mention of a complex synthetic organic chemical in the pharmacopœia, and was perhaps the forerunner of the many potent organic drugs now in use.



Left: Sir Richard Quain, Bart., F.R.S., 1816-98. Apothecary to the Hospital, 1841-46. From a painting by J. E. Millais.



Right: Joseph Thomas Clover, Apothecary to the Hospital, 1848-53. From a print lent by the Royal Society of Medicine.

U.C.H. Pharmacopœia 1828

Since this history was written there has been discovered a copy of a University College Hospital Pharmacopœia published in 1828, the year that the University and Dispensary were opened. This copy is in the library of the Pharmaceutical Society and, so far as I can ascertain, is the only one in existence, there being none in the hospital or medical school. The edition is a small book of thirty-five pages with a hard cloth cover and is entirely written in Latin. It was edited by Anthony Todd Thompson, professor of materia medica and pharmacy.

The first nine pages consist of a list of the materia medica, and is divided into Medicamenta Simplicia, Præparata Chemica, and Præparata Pharmaceutica. The first section of the list contains various vegetable drugs, volatile oils, a few products of animal origin such as adeps and honey, and a few minerals. Many of the drugs are still in common use but a few, such as acori calami radix, contrayervæ radix, rutæ herba and alvæ herba are seldom, if ever, used in medicine today. Benzoin is included under its old name of benzoe and ergot as secale cornutum. Most

of the præparata pharmaceutica are preparations of drugs still used to some extent today.

The remainder of the book consists of Formulæ Medicinales. Among the oral medicaments are boluses, confections, decoctions, electuaries, drops, juleps, linctuses, mixtures, pills, powders and solutions. Unusual preparations include electuarium dolichi (electuary of cowhage), julepum acidi nitrici, and pulvis conii compositus. Among the mixtures mistura cretæ astringens, mistura quassia, and mistura sennæ are very similar to preparations used today. Several of the pills and powders, such as those of aloes, colocynth, digitalis and rhubarb, and grey powder, are still widely used.

External or topical preparations included Aquæ Ophthalmicæ (Astringens, Resolvens and Sedativa), poultices of charcoal, conium, yeast, and mustard, an embrocation, a plaster, numerous enemas, gargles, lotions, liniments and ointments. Of these preparations only lotion of zinc sulphate, turpentine liniment, soap liniment, turpentine enema and gargle of borax are used to any extent today. A preparation known as fomentum ammoniæ muriatis is very similar to lotio evaporans of the 1949 B.P.C.

The appendices to the book are a scheme for the examination of patients and a table of weights and measures. In the latter a pint is given as 16 fluid ounces and a gallon as 128 fluid ounces.

The editions of 1915, 1921 and 1926 were edited by Dr. C. H. Hampshire. That of 1915 included the local anæsthetic procaine for the first time. Dr. H. Davis was the editor of the pharmacopœias of 1933 and 1939, by which time the book had assumed its present form. The current edition appeared in 1949, and the future form of the book is now under consideration.

This account of the history of pharmacy at U.C.H. since 1828 shows the part a hospital pharmacy can play in pharmaceutical research, and hospital pharmacists are fortunate in having the opportunity of thus aiding its development.

I gratefully acknowledge much help in tracing the earlier history from Mr. C. F. A. Marmoy, F.L.A. (assistant librarian, University College) and Mr. A. T. Pickton, B.A., F.L.A. (librarian, U.C.H. Medical School).

CONSUMPTION AND PRODUCTION OF DRUGS AT U.C.H.

TABLE I

APPROXIMATE ANNUAL CONSUMPTION OF VARIOUS ITEMS

Ether anæsthetic	...	648 lb.
Aspirin	...	6 cwt.
Barium sulphate	...	1 ton
Sodium thiosulphate	...	4½ tons
Phenol	...	18 cwt.
Liquor sulphestol.	...	100 gall.
Liquor hydrogen. perox.	...	35 cwt.
Lysol	...	600 gall.
Paraff. liq.	...	500 gall.
Benzyl penicillin	...	40,000 mega units
Sulphonamide tabs.	...	100,000
Antihistamine tabs.	...	400,000

TABLE IV
AVERAGE WEEKLY ISSUE OF MEDICAL GASES

Oxygen	120-ft.	...	37
	40-ft.	...	15
	20-ft.	...	37
Mixtures	148-ft.	...	4
	20-ft.	...	1
	40-ft.	...	2
Nitrous oxide	200-gall.	...	38
	400-gall.	...	4
	500-gall.	...	12
Carbon dioxide	2-lb.	...	2

TABLE III
AVERAGE WEEKLY ISSUE OF DRESSINGS

Gauze, 100-yd. rolls	...	81
Lint, 1-lb. rolls	...	23
Cotton wool, 1-lb. rolls	...	173
Masks, packets of twelve	...	64
Butter muslin, 12-yd. packets	...	34
Bandages, packets of 1 doz.	...	170
Jaconet	...	52 yd.
Gauze, ribbon	...	62
Gamgee tissue, 1-lb. rolls	...	23
Cellulose wadding, 1-lb. rolls	...	43
Cellophane for masks	...	2,850 sheets
Plaster, adhesive	...	148 rolls

TABLE II

PREPARATIONS MANUFACTURED IN ONE YEAR

Barium suspension	...	350 gall.
Ointments, cream, pastes, poultices	...	4,125 lb.
Lotions and liniments	...	392 gall.
Tablets	...	2,657,000
Sterile external preparations (paraffin, tulle gras, etc.)	...	13,464
Instrument antiseptic solution (2-1)	...	1,840 gall.
Glycerin thymol (2-1)	...	1,000 gall.

TABLE V

STERILE PREPARATIONS MANUFACTURED IN ONE YEAR

Ampoules	...	44,000
Multiple-dose containers	...	10,000
Infusion fluids	...	12,000
Penicillin injection 10 mega.	...	3,500 bottles
Streptomycin I.M. x 1 gm.	...	21,500
Streptomycin intrathecal	...	400 x 10-c.c. amps.
Other sterile solutions	...	5,300 bottles
Ointments, etc.	...	7,500 units

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*Read at British Pharmaceutical Conference.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JULY 8: Although the general level of business in HEAVY CHEMICALS is reported to have improved very substantially from that of a year ago the same is not true of the PHARMACEUTICAL and FINE CHEMICALS. Trading in that section is still dull and spasmodic. Such signs as have appeared that a revival of trade was on the way have generally turned out to be transitory. Five more chemicals are added to the list of exemptions from Key Industry Duty (see p. 27). No price changes have been recorded during the week.

Interest in CRUDE DRUGS ranged over a wide variety of commodities. Among SPICES that were dearer were TURMERIC and CHILLIES. The market for PEPPER showed an easier tendency at first but later in the week it developed a firmer tone. CLOVES were marked down by sixpence a lb. on the spot following a cut of ninepence in quotations for shipment. Some price adjustments were also made in GINGER. IPECACUANHA is still short on the spot and prices remain firm. In the AROMATIC SEEDS, there was little or no interest shown in CARAWAY, CELERY and CUMIN. SHELLAC, which in the previous week rose to the peak for the year, went up by another 2s. 6d. per cwt. The Board of Trade are now prepared to issue import licences for AGAR for the period July 1 to June 30, 1954 (see p. 25).

Firmer conditions prevailed in a number of ESSENTIAL OILS. They included LAVANDIN (up by 1s. 6d. per lb.); Penang PATCHOULI (1s. 6d.); Bourbon GERANIUM (7s. 6d.); EUCALYPTUS moved up threepence per lb. after several months of inactivity. Among the oils which declined were Ceylon CITRONELLA (one penny per lb. lower), Chinese PEPPERMINT (1s.), and LEMON-GRASS. Shipment offers of French OLIVE were slightly lower.

UNITED STATES DRUG AND CHEMICAL REPORT

NEW YORK, JULY 7: Japanese producers are reported to have resumed offerings of CRUDE IODINE, following a sharp break in Chilean and domestic material to \$1.30 per lb. and are said to have agreed to meet the new low

figures. There are rumours of slightly better inquiry for natural MENTHOL but the price of certain grades of synthetic menthol has dropped to \$5.75 per lb. (down 25 cents).

Higher per lb. among CRUDE DRUGS were AGAR No. 1 Kobé at \$2.30 (up 5 cents), Bourbon VANILLA BEANS at \$4.75 (25 cents), Mexican whole vanilla beans at \$4.75 (25 cents). Lower per lb. were LOBELIA at 40 cents (down five cents), TOLU BALSAM, \$2.45 (10 cents), and TRAGACANTH, No. 1, \$2.55 (five cents). Also lower was CANADA BALSAM at \$31.00 per gall. (\$1.50).

Among ESSENTIAL OILS, CASSIA was higher at \$9.50 per lb. (up \$1). Lower per lb. were natural PEPPERMINT at \$5.00 (down 15 cents), redistilled PEPPERMINT at \$5.50 (25 cents) and EUCALYPTUS at 65 cents (five cents).

Pharmaceutical Chemicals

AMIDOL.—In 14-lb. lots the price is 19s. per lb.; 7-lb., 19s. 6d.

AMMONIUM CARBONATE.—B.P. lump is £73 5s. per ton; POWDER, £76 5s. BICARBONATE is £48 15s. per ton; all delivered free United Kingdom in non-returnable packages.

BRUCINE.—ALKALOID is from 1s. 8d. to 1s. 9½d. per oz., and NITRATE and SULPHATE from 1s. 7d. to 1s. 8½d. per oz., as to quantity.

CALAMINE.—1-cwt. lots are now 1s. 8½d. per lb.

CALCIUM CHLORIDE.—B.P. crystals are 1s. 0½d. per lb. in 1-cwt lots and exsiccated, 9½d.

CALCIUM SUCCINATE.—Quotations are from 10s. 6d. to 12s. 6d. per lb., as to quantity. SUCCINIC ACID is from 10s. 6d. to 12s. 3d. per lb.

CARMINE.—Prices are from 75s. to 80s. per lb., according to quantity.

CHALK.—In minimum 1-ton lots powder is £21 and cones, £22 10s. per ton.

CHLOROCRESOL.—Pharmaceutical quality is quoted at 6s. per lb., in 1-cwt. drums.

CHLOROFORM.—1-cwt. lots in winchesters are now 3s. 6d. per lb.; 56-lb., 3s. 6½d. In drums, prices are 3s. 4d. and 3s. 4½d.

CHLOROXYLENOL.—B.P. quality is quoted at 6s. 9d. per lb. for 1-cwt. lots.

CITRIC ACID.—British makers quote 205s. per cwt. for 1.4-cwt. lots and 200s. per cwt. for 5-cwt.

COCAINE.—Rates per oz. are as follows: ALKALOID and SALICYLATE, bottles ¼-oz., 27s. each; ½-oz., 53s. each; 1-oz., 104s.; 4-oz., 103s.; 8-oz., 102s.; 16-oz., 101s.; tins, 25-oz., 100s.; HYDROCHLORIDE and NITRATE, bottles, ¼-oz., 24s. 6d. each; ½-oz., 48s. each; 1-oz., 94s.; 4-oz., 93s. 3d.; 8-oz., 92s. 3d.; 16-oz., 91s. 6d.; tins, 25-oz., 90s. 6d.

DICOPHANE (DDT).—Prices are as follows:—1-cwt. lots, 3s. 1d. per lb.; 1-ton,

2s. 10d. Lower prices for greater quantities.

EPHEDRINE.—In 100-oz. lots ALKALOID is about 10s. 3d. per oz. (361s. 6d. per kilo); HYDROCHLORIDE, 4s. 7d. (161s. 8d. per kilo); SULPHATE, 5s. 6d. (194s. per kilo).

GLYCERIN.—Rates for pharmaceutically pure are as follows:—

	Under 1-cwt.	1-cwt. and under 5-cwt.	5 cwt. and under 1 ton	1 ton and under 5 tons	5 tons and under 25 tons
Minimum deliveries off contract of	—	1 cwt.	1 cwt.	5-cwt.	10 cwt.
Per cwt.	s. d.	s. d.	s. d.	s. d.	s. d.
TINS					
14-lb.	325 0	320 6	316 6	312 0	310 6
28-lb.	323 0	318 6	314 6	310 0	308 6
56-lb.	319 0	314 6	310 6	306 0	304 6
DRUMS					
1-cwt.	—	299 0	295 0	290 6	289 0
2½-cwt.	—	296 6	293 0	288 6	287 0
5-cwt.	—	—	292 6	288 0	286 6
10-cwt.	—	—	291 6	287 6	286 0

HYDROGEN PEROXIDE.—20 vols. is 4s. 2d. per gall. for carboy lots.

ISOPRENALINE SULPHATE.—B.P.C. is 2s. 4d. per gm. for 100-gm. lots.

MAGNESIUM CARBONATE.—Minimum bulk rate for LIGHT is 121s. per cwt.; HEAVY is 156s., nominal.

MAGNESIUM HYDROXIDE.—Makers' prices for B.P.C. are: 1-cwt. lots, 3s. 5d. per lb. and 1-ton, 3s. 2d. per lb.

MANDELIC ACID.—1-cwt. lots in 28-lb. containers are 10s. 9d. per lb. The CALCIUM SALT is also 10s. 9d., while SODIUM is 11s. 3d. per lb. for 1-cwt. lots.

MERCURY DERIVATIVES.—Quotations (per lb.) for 1-cwt. lots are: AMMONIATED, B.P., lump or powder, 21s. 9d.; PERCHLORIDE, B.P., powder, 19s. 8d.; SUBCHLORIDE, B.P. (calomel), 22s. 3d.; OXIDES, B.P.C., levigated, or yellow, B.P., 22s. 3d.

PARAFFINS.—Prices to wholesaler distributors are as follows:—Liquid: HEAVY, B.P., £98 17s. 6d. per ton; LIGHT, B.P., £81; light TECHNICAL WHITE, £68 10s., all in 40-45-gall. returnable loaned drums, delivered U.K. Soft: WHITE, medium consistency, £86 2s. 6d. per ton; WHITE, soft consistency, £84 and YELLOW, £64, all B.P. in non-returnable drums, delivered. Hard: Melting point, 135/140° F., is £72 15s.; 145/150° F., £80; and 160/165° F., £100 per ton, in minimum-ton lots, ex works.

PILOCARPINE.—In 100-oz. (2½-kilo) lots prices are: HYDROCHLORIDE, 42s. 6d. per oz. (1,428s. 6d. per kilo); NITRATE, 38s. per oz. (1,340s. per kilo).

POTASH, SULPHURATED.—B.P.C. lump is 2s. 3d. per lb. for 1-cwt. lots.

SACCHARIN.—In lots of 1-lb. and over B.P.C. powder is quoted at 99s. 10d. per lb.; the SODIUM SALT is 80s. 10d. per lb. Prices include duty and carriage.

SALICYLIC ACID.—Prices are: 5-cwt. lots in bulk, 2s. 11½d. per lb.; 1-cwt., 3s.; 56-lb., 3s. 7d.

SALOL.—Quotations for B.P.C. are about 9s. per lb. for 1-cwt. lots.

SANTONIN.—The following prices now apply in the home market, including Eire:—5-kilo lots, £63 per kilo; 2.4-kilo lots, £54 10s.; 1-kilo, £66; 500 gm., £67 10s.; 250 gm., £69; smaller quantities, £72.

SPARTEINE SULPHATE.—Price is 5s. 8d. per oz.

TEREBINTH.—B.P. is 2s. 3d. per lb. for carboy lots.

EXCHANGE RATES ON LONDON

At the opening on Wednesday

*Alexandria ..	Piastres to £	97½-97½
Amsterdam ..	Florins to £	10.56-10.72
*Bombay ..	Shillings to rupee	1/5½-1/6½
Brussels ..	Francs to £	138.95-141.05
Copenhagen ..	Kronor to £	19.19½-19.48½
Dutch West Indies ..	Florins to £	5.24-5.32
*Hong Kong ..	Shillings to \$	1/2½-1/2½
*Karachi ..	Shillings to rupee	2/1½-2/1½
Lisbon	Escudos to £	79.90-81.10
*Montreal ..	Dollars to £	2.79½-2.79½
New York ..	Dollars to £	2.78-2.82
Oslo	Kronor to £	19.85-20.15
Paris	Francs to £	972-988
Stockholm ..	Kronor to £	14.37-14.60
*Singapore ..	Shillings to £	2/3½-2/3½
Zurich	Francs to £	12.14-12.35

*Free market rates; remainder Bank of England.

Crude Drugs

AGAR.—Kobé No. 1 on the spot is very scarce at 18s. 6d. per lb.

ALOES.—Prime Cape on the spot is 165s. per cwt.; shipment, 157s. 6d., c.i.f.

BALSAMS.—Quotations (per lb.) are:—*Canada*: Spot is 26s. 6d.; new-crop for prompt shipment, 22s. 6d. landed terms. *Copaiba*: Soluble Para, spot, 13s. *Peru*, 10s. 6d., duty paid, and 9s. 3d., c.i.f., for shipment. *Tolu* (genuine as imported) on the spot is offered at 19s. and for shipment, 18s., c.i.f.

BELLADONNA.—A parcel of ROOT testing 0.44 per cent. is offered at 1s. 6d. per lb. on the spot, duty paid; LEAVES are from 3s. per lb., as to test.

BENZOIN.—Good quality Sumatra block on the spot is £29 10s. per cwt.

BISMUTH.—In minimum 4-cwt. lots METAL is 17s. per lb.

BUCHU.—New-crop for shipment is 1s. 9d. per lb., c.i.f., and 2s. for spot.

CAMPHOR.—Chinese (B.P.) powder on the spot is 3s. 7½d.; ¼-oz. tablets are quoted at 5s. 6d. per lb.; 2½-lb. slabs, 4s. 9d. per lb., all duty paid.

CHILLIES.—Sierra Leone on the spot is 200s. per cwt.; for shipment, 175s. per cwt., c.i.f.; Mombasa are again firmer at 270s., c.i.f., with spot unchanged at 280s.

CINNAMON.—Ceylon for shipment (c.i.f.), OOOO, 2s. 9d.; OOO, 2s. 8d.; OO, 2s. 7d.; O, 2s. 6d.; firsts, 1s. 11d.; seconds, 1s. 9½d.; thirds, 1s. 9½d.; quillings, 1s. 4½d.; featherings, 10½d.; chips, 6d. per lb.

CLOVES.—Zanzibar on the spot are 9s. 6d. per lb., and 7s. 6d., c.i.f., for prompt shipment.

ERGOT.—Portuguese for shipment is nominal at 14s. 6d. per lb., c.i.f.; spot, 15s. 3d.

GALANGAL.—Quiet. Spot material is offered at 85s. per cwt.

GAMBOGE.—Good average Siam pipe is offered at £32 10s. per cwt., duty paid.

GENTIAN.—French natural on spot is 100s. per cwt., and 95s., c.i.f.; sliced, 115s., spot.

GINGER.—African on the spot is 95s. per cwt.; new-crop, for shipment, 87s. 6d., c.i.f. Jamaican No. 3 is about 112s. 6d. on the spot, and at 107s. 6d., c.i.f., for shipment.

GUAIACUM RESIN.—Quotations are about 3s. per lb. for spot material.

GUM ACACIA.—Kordofan cleaned sorts on the spot around 101s. per cwt. Offers for July-August shipment are 89s., c.i.f., and 88s. for August-September.

IPECACUANHA.—Spot supplies are scarce. Limited offers of Colombian at 42s. per cwt. Forward: Colombian, prompt shipment, 39s. per lb., c.i.f.; Nicaraguan, July-August shipment, 44s., c.i.f.

JALAP ROOT.—Vera Cruz is offering at from 3s. 2d. to 3s. 6d. per lb., according to test.

KARAYA.—No. 1 gum on the spot is unchanged at 200s. per cwt.; No. 2 is 140s.; No. 1, for shipment, 185s., c.i.f.

KOLA NUTS.—African halves are available on the spot at 4½d. per lb., 3½d., c.i.f., for shipment.

LANOLIN.—B.P. anhydrous is £175 per ton and hydrous, £155.

NUTMEGS.—West Indian 80's quoted at 3s. per lb. on the spot and 2s. 6d., c.i.f., for shipment.

ORRIS ROOT.—Offers of average quality Florentine are now 155s. per cwt., ex-warehouse.

PAPAIN.—Spot values for East African grade one are 38s. 6d. and forward, 34s. to 36s., c.i.f., per lb and grade two, 35s. to 36s., spot.

PEPPER.—White Sarawak is now offered

at 10s. 7½d. per lb. on the spot and 10s. 3d., c.i.f., for afloat. Black Malabar is 1,120s. per cwt., on the spot, and 1,065s., c.i.f., for July shipment. Black Sarawak afloat is offered at 8s. 3d. per lb., c.i.f.

PODOPHYLLUM.—*Emodi* root on the spot is 170s. per cwt. *Peltatum*, 336s.

QUASSIA.—June-July shipment is 31s. 6d. per cwt. Little material on the spot.

QUILLAIA.—Whole bark is £105 per ton, c.i.f., and spot, £125.

RHUBARB, Chinese.—Spot offerings include: round Shensi at 12s. 3d. per lb.; rough round high dried, from 3s. 6d. to 8s. 6d. as to quality.

SAFFRON.—Firm. Mancha superior is about 155s. per lb.

SANDARAC.—Morocco is offering on the spot at 13s. per lb.

SASSAFRAS.—Bark is offered at 4s. 9d. per lb., on the spot.

SEEDS.—**ANISE.**—Quiet, Cyprian offered at 137s. 6d. per cwt., and Turkish, 140s., duty paid (135s., in bond). **CARAWAY.**—Sellers of Dutch are asking 87s. per cwt., duty paid. Little interest shown. **CELERY.**—Indian offering at 1s. 11½d. per lb., duty paid. No business reported at this figure. **CORIANDER.**—Spot: Moroccan is offered at 60s. per cwt., duty paid (55s., in bond); English, 70s. Moroccan new-crop is quoted at 52s. 6d. for July-August shipment. **CUMIN.**—Spot: Cyprian, 140s. per cwt.; Moroccan, 150s., duty paid; Maltese, 160s. Shipment: New-crop Cyprian, 115s.; Moroccan, 105s.; Maltese, 140s. **DILL.**—Few enquiries for Indian at 80s. per cwt., spot London. **FENNEL.**—Indian is offering freely at 177s. 6d. per cwt., spot London. **FENUGREEK.**—Spot Moroccan is 47s. 6d. per cwt., duty paid. The shipment price is reported at 38s. 6d., c.i.f., for new-crop. **MUSTARD.**—English, 70s. to 87s. per cwt., according to quality.

SENEGA.—Spot supplies are from 13s. 3d. to 13s. 6d. per lb., and for prompt shipment, 11s. 9d., c.i.f.

SHELLAC.—Firm. Spot quotations are:—F.O.T.N., pure, 220s.; F.O. standard No. 1, 232s. 6d.; fine orange, 245s. to 280s. per cwt., ex-London warehouse.

SLIPPERY ELM BARK.—Selected slabs are 4s. per lb., and grinding quality, 3s. 3d. spot.

STRAMONIUM.—Indian LEAVES are 5½d. per lb., spot and European, 97s. 6d. per cwt.

STROPHANTHUS.—*Kombé*, 100 per cent. is quoted at about 15s. per lb., on the spot, and *Gratus*, 25s. per lb., nominal.

STYRAX.—Spot is 5s. 6d. per lb., duty paid.

TRAGACANTH.—Easier, No. 1 ribbon on the spot is £112 10s. per cwt.; No. 2, £87 10s.; No. 3, £67 10s.

TURMERIC.—Madras finger, 96s., c.i.f., per cwt. Ranjapore type has sold at 97s. 6d. on the spot, June-July shipment, 91s., c.i.f., quoted.

VALERIAN.—Indian, 165s. per cwt. Belgian, 200s., spot.

VANILLIN.—Rates (per lb.) are:—5-cwt. lots, 30s.; 1-cwt., 30s. 3d.; 56-lb., 30s. 6d.; smaller quantities, 30s. 9d.

WAXES.—**BEES.**—Dar-es-Salaam spot, 430s. per cwt., July shipment, 415s., c.i.f.; Sudanese and Abyssinian, 360s., c.i.f., spot, 420s., duty paid; Benguela, 370s., c.i.f., and 420s., duty paid. **CANDELILLA.**—Spot is 635s. per cwt. **CARNAUBA.**—Prime yellow, only small lots available on the spot at 1,240s. per cwt.; afloat, 1,200s., c.i.f.; shipment, 1,200s., c.i.f.; fatty grey is 1,000s. on the spot; shipment, 930s., c.i.f. **MONTAN.**—Reibek crude on the spot is 125s. per cwt. **OURICURI.**—Spot, 0.5 per cent. impurities, 730s. per cwt. **SPERMACETI.**—Case lots are 1s. 9d. per lb. upwards as to quality.

WITCH HAZEL.—Leaves on the spot are about 1s. 10½d. per lb.

Essential and Expressed Oils

ALMOND.—B.P. is from 6s. to 7s. 6d. per lb., as to quantity.

AMBER.—Rectified on the spot is quoted at from 1s. 6d. per lb.

ANISE.—Spot supplies are offered at from 6s. 6d. per lb. for original drums, and for shipment about 6s. 3d., c.i.f.

BAY.—W. Indian is 8s. 6d. to 9s. per lb. on the spot.

BERGAMOT.—Spot value is about 82s. per lb.

BIRCH TAR.—Rectified is about 14s. per lb. in 1-cwt. lots.

BOIS DE ROSE.—Brazilian on the spot is 31s. and 29s. 9d., c.i.f.

CAJUPUT.—Spot supplies are 22s. 6d. per lb.

CALAMUS.—Imported oils are offering from 57s. 6d. per lb.

CAMPHOR, WHITE.—Chinese is 3s. per lb., on the spot.

CITRONELLA.—In original drums prices (per lb.) are:—Ceylon, spot, 3s. 1d., and shipment, 2s. 10d., c.i.f.; Java, spot, 3s. 10½d., in bond, and shipment, 3s. 9d., c.i.f. Formosa, spot, 3s. 10½d. in bond and 3s. 6d., c.i.f., June-July shipment.

DILL.—B.P. English-distilled oil is quoted at 60s. per lb. Imported oils are offered at from 30s. to 40s. per lb., as to origin.

EUCALYPTUS.—Drum lots of 70 to 75 per cent. eucalyptol on the spot are 4s. 6d. per lb., and 80 to 85 per cent., 4s. 9d.

FENNEL.—Spanish sweet on the spot is quoted about 10s. 6d. per lb.

GERANIUM.—Bourbon on the spot is firmer at 80s. Shipment is now 77s., c.i.f.

LAVANDIN.—Spot value is increased to 17s. per lb.

LAVENDER.—French, 40-42 per cent. linalol on the spot is about 44s. per lb.

LAVENDER SPIKE.—Spanish is about 11s. per lb.

LEMON.—Firm. B.P. (4 per cent. citral) on the spot is from 36s. to 49s. per lb. upwards of 53s. for best quality.

LEMONGRASS.—East Indian is 6s. 9d. on the spot and 6s. 1½d. per lb., c.i.f.

NUTMEG.—English-distilled oil is from 42s. 6d. to 44s. per lb. Imported oil is offered at 25s. per lb., duty paid, for drum lots.

OLIVE.—Pharmaceutical oil in drums is from 24s. to 26s. per gall. on the spot, ex warehouse. French virgin (maximum acidity 1 per cent.) is offered for shipment at £280 and French pharmaceutical (maximum acidity 0.25 per cent.), at £270 per 1,000 kilos, c.i.f. London. Spanish virgin is offered in drums on the basis of £250 per 1,000 kilos, f.o.b., Spanish ports.

PATCHOULI.—Seychelles on the spot is 49s. per lb., and Penang, 52s. 6d. per lb. Penang for shipment, 48s., c.i.f.

PENNYROYAL.—Quotations are about 12s. 6d. per lb., duty paid.

PEPPERMINT.—Spot: *Arvensis*, Chinese, in drums is 27s. per lb. and Brazilian, 17s. Forward: Chinese, 24s. 6d. per lb., c.i.f. Japanese, 25s., c.i.f. Italian "Mit-cham" type oil is 49s. to 52s. 6d. per lb., as to quality and forward from 47s. 6d., c.i.f.

SAGE.—Spanish is offered at from 8s. 6d. to 9s. per lb., spot.

SANDALWOOD.—Mysore is 70s. per lb. fo. 175-lb. lots.

SASSAFRAS.—Brazilian natural is offering at 6s. 3d. per lb., duty paid, and 4s. 9d., c.i.f.

SPEARMINT.—Offers of B.P.C. quality are from 62s. 6d. per lb.

THYME.—B.P.C. is about 9s. 6d. per lb.

VETIVERT.—Bourbon in original drums on the spot is about 117s. 6d. per lb.

WORLD TRADE

Persian Barter Plan.—A 60 to 100 million dollar barter agreement under which Persia would exchange oil for Italian industrial and pharmaceutical products is expected to be discussed in Rome shortly.

Austrian Trade Liberalisation.—Among the main items to be placed on the Austrian import liberalisation list on July 1 were olive oil, waxes, "ordinary quality" cameras, and pharmaceutical raw materials.

New Zealand Import Controls.—The New Zealand authorities have announced that zinc oxide, previously exempt from import control, now requires licences to import. Applications will in future be considered individually.

Argentine Medicinal Imports.—The Argentine Central Bank has started granting exchange licences for the importation of medicinal products valued at 320 million pesos. The first licences, valued at 25 million pesos, were granted to the sterling area.

Australia Bans Heroin Imports.—Australia has imposed a ban on the importation of heroin in any form following discussions between Government and interested professional groups and the Australian National Health and Research Council.

German Import Authorisations.—The following authorisations for imports into West Germany from Great Britain have been published (the value in D-marks in parentheses):—Penicillin (150,000); acetone (175,000); soap (27,500); stearine and oleine (32,000);

tartaric acid (32,000); lactic acid (42,500); toilet preparations (75,000).

Swiss Export Licensing Changes.—The Swiss Ministry of Commerce has exempted the following from export licensing requirements from July 1:—Fresh pancreas (including frozen); photographic apparatus; ergot; pancreas (dried, powdered, etc.); crude glycerin.

Pakistan Penicillin Production.—The Pakistan Government has granted permission to a Karachi firm to set up a unit to make penicillin and streptomycin in collaboration with a company of antibiotic manufacturers of international repute. The unit is likely to start production in about two years.

French Imports.—French importers have been notified of the opening of credits for the purchase of cortisone, raw materials for the production of cortisone, antibiotics and raw materials for their manufacture, and miscellaneous pharmaceuticals in the United States and Canada. An import quota for gums and waxes to be bought in sterling countries outside the O.E.E.C. area and in Indonesia has been opened.

Australia Modifies Import Controls.—Australia is to relax import controls immediately. Imports from non-dollar, non-Japanese sources known as Category A goods which have been licensed on the basis of 70 per cent. of the base year 1950-51, are to be licensed on the basis of 80 per cent. of that year. The basis for Category B goods is raised from 30 to 40 per cent. of the base year.

OVERSEAS ECONOMIC REPORTS

REPORTS were published recently for the Board of Trade by H.M. Stationery Office on the economic and commercial conditions and commercial conditions in India (11s.), British East Africa (5s.) and Finland (4s.).

Abstracts concerning the pharmaceutical and allied industries are given below:—

India

During the past ten years there has been a remarkable expansion in the cardamom growing industry. Total production is estimated at about 1,350 tons of which two-thirds is consumed internally and the rest exported. Nearly 80 per cent. of the world's supply of lemongrass oil is produced in the State of Travancore-Cochin where the area under cultivation is estimated at 35,000 acres and the output at 200,000 gall. The fine chemical industry is still comparatively small, its development being hindered by the high cost of intermediates, of which there is no local production. The United Kingdom, the United States and Switzerland are the principal suppliers of imported drugs and medicines.

British East Africa

Imports of chemicals and allied products at £3.8 millions were 50 per cent. higher than in 1950. The chief item of the group was medicines and drugs which in 1950 were worth £700,000 and in 1951 £1,042,000. The

U.K. enjoyed approximately 90 per cent. of the trade in drugs and medicines but competition by Germany was expected to grow. Toilet soaps are made locally but import figures show that imported brands are preferred by the public.

Finland

Imports of chemicals and pharmaceuticals from the U.K. increased steadily between 1948 and 1951 (the latest figures given), from 550 million finnmars in 1948 to 1,007 in 1951. The domestic chemical industry has made important progress although the country has few of the raw materials.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Sunday, July 12

LONDON PHARMACY RAMBLERS, walk to Arundel Park and the Middle Arun Valley, Sussex. Meet on 9.37 a.m. train from Victoria for Amberley (carriages labelled "S. Robinson's party"). 9.30 a.m. train from London Bridge connects with above at East Croydon.

Wednesday, July 15

MERSEYSIDE BRANCH, NATIONAL ASSOCIATION OF WOMEN PHARMACISTS, Outing. Meet Woodside Ferry at 2.30 p.m.

ROMFORD BRANCH, PHARMACEUTICAL SOCIETY, visit to Ciba Laboratories, Ltd., Horsham, Sussex. Coach leaves Romford market place at 1 p.m.

HERB CROPS

Perks & Llewellyn, 9 High Street, Hitchin, Herts, state that the LAVENDER crop will be a small one this year. Although the older plants should yield well, younger plants are disappointing. A great deal depends on the weather, with sunshine needed.

Joseph Flemons & Sons, Ltd., Dunstable, Beds, state that so far as can be seen most herbs will be in reasonably good supply. Among those for which demand exceeds supplies are:—PARSLEY PIERT, AGRIMONY, CENTAURY, EYEBRIGHT, FEVERFEW, FIGWORT, HEARTSEASE, LIME FLOWERS, and WOOD BETONY. Considerable quantities of ELDER FLOWERS have again been harvested, and the prospects for RED POPPY PETALS is good provided there is not prolonged wet weather until the beginning of August. Crops of *Digitalis purpurea* and *D. lanata* seem to be good, but with the very wet spring, weeds have been and are continuing to be a great nuisance.

TRADE MARKS

From the "Trade Marks Journal," July 1

For all goods (3)
SOPRALEX, 717,141, by William Bryan, Liverpool.

For dentifrices, adhesives for dental plates, and cleaning preparations for artificial dentures (3)
STERAFAST, 717,149, by Reckitt & Colman, Ltd., Hull.

For non-medicated toilet preparations, shampoos and preparations for the hair (3)
CLYNOL, 717,769, by Sherwood Products, Ltd., London, E.C.4.

For insecticides (5)
METACID, 710,299, by Farbenfabriken Bayer, Leverkusen, Germany.

For pharmaceutical vitamin preparations (5)
ZYMACAP, 712,817, by Upjohn of England, Ltd., London, E.C.2.

For penicillin (5)
AQUACILLIN, 713,228, by Schenley Laboratories, Inc., New York, U.S.A.

For medicated drinks (5)
LUC, B715,372, by Lucozade, Ltd., Brentford.

For pharmaceutical preparations for human and veterinary use (5)
FITOBAN, 716,255, by Evans Medical Supplies, Ltd., Liverpool. STELADONE, 716,501, by Ciba, Ltd., Basle, Switzerland.

For all goods (5)
SCUTALEX, 716,640, by Imperial Chemical Industries, Ltd., London, S.W.1. SOPRALEX, 717,142, by William Bryan, Liverpool.

For medicated sweetmeats (5)
MIKEY, 716,825, by the Dales Tablet Makers, Ltd., Keighley.

For ointments and liniments (5)
KASEMOL, 716,921, by Chas. Zimmermann & Co., Ltd., Greenford.

For uricosuric preparations for the treatment of gout and gouty arthritis (5)
BENEMID, 716,947, by Sharp & Dohme, Ltd., Hoddesdon.

For menstruation belts (5)
SISTER MONICA, 717,194, by Faire Bros. & Co., Ltd., Leicester.

For medicated preparations for the skin and scalp (5)
YAHGO, 717,287, by Yahgo Laboratories, Brighton.

For insecticides, larvicides and fungicides (5)
MALADIOL, 717,811, by Shell Chemicals, Ltd., London, E.C.3.

For safety pins (26)
NAPPINS, B710,803, by George Goodman, Ltd., Birmingham.

*All eyes on the
beach
girl!*



This gaily coloured showcard will be catching the eyes of your customers all summer through.

The sun-screening agent in a base of vanishing cream, that's Beach. It allows a healthy, pleasing tan to be acquired with no discomfort—or, if protection has been neglected, Beach soothes the rawness and prevents further burning. And remember, Beach is sold only through pharmacists.

RETAIL PRICE

2/3 per tube

TRADE PRICE

12/- per doz. tubes

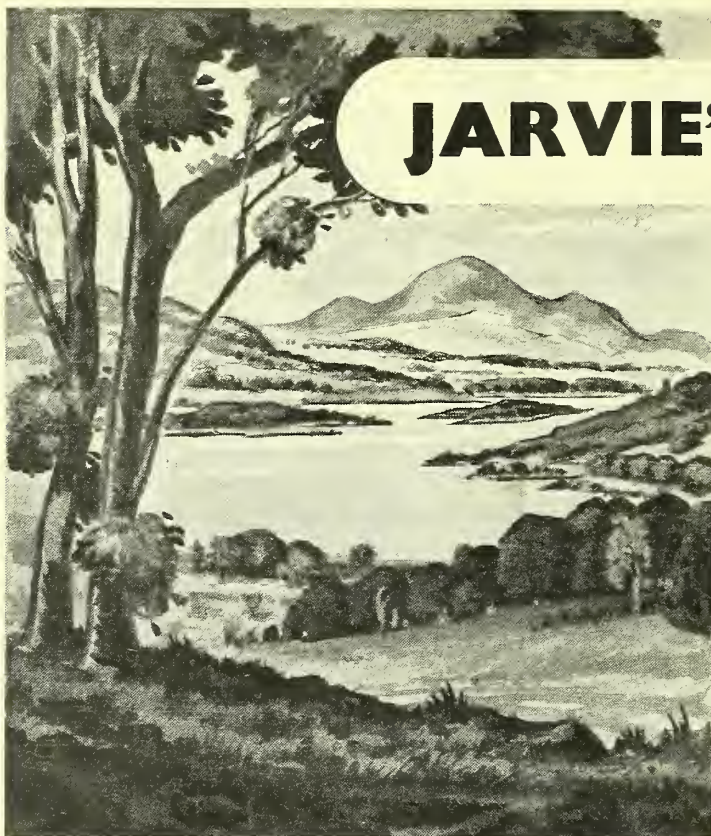
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WINDSCHUEGL LTD



Cable: WINDSCHUEGL LONDON

1 LEADENHALL STREET,
LONDON, E.C.3

There should be no QUERY..

Thirty years of scientific and engineering research and experience ensure a satisfactory answer to any sealing problem.

Why not let us help or advise you, whether by recommending the best closure for your product or designs for printed Metal Caps or Moulded Closures.



UGB CLOSURE
DIVISION

UNITED GLASS BOTTLE MANUFACTURERS LTD

8 LEICESTER STREET, LONDON, W.C.2 - Telephone : GERRARD 8611 (18 LINES) Telegrams : UNGLABOMAN, LESQUARE, LONDON

...you can rely on
'RELIANCE'
SPONGES



"RELIANCE" Sponges offer you the widest range of Natural Sea Sponges for all purposes.

The Cresswell organisations established over 150 years, are the largest bulk buyers and get the best when the sponge crops are fished.

Attractive display material and interesting literature are at your disposal. Your enquiries will receive our expert attention and a representative will gladly call on request.



CRESSWELL BROS. SPONGES

(World Natural Sponge Suppliers Ltd.)

**LARGEST PROCESSORS AND STOCKISTS
OF NATURAL SEA SPONGES IN THE WORLD**

International Building, Buck Street, Camden Town,
London, N.W.1

Phone: GULliver 5462/3. Telegrams: Sponge, Norwest, London.

**BARIUM
SULPHATE B.P.**

Bariform Brand Barium Sulphate for X-ray diagnoses is a fine white powder conforming to the B.P.

Designed for the preparation of barium meals, it has excellent suspensibility and extremely fine particle size.

It is also available as a rapidly dispersible paste.

**HYDROGEN
PEROXIDE**

10 and 20 volumes in bottles.
A wide range of packs and labels
available.



LAPORTE

Laporte Chemicals Ltd., Luton. Tel.: Luton 4390 Grams: "Laporte Luton"

THE **NEW**
CHLOROPHYLL
IN **CAPSULE** FORM
PURAPHYL

In bottles of 30 Capsules—

Retail selling price - 2/6d.

In sealstrips of 6 Capsules—

Retail selling price - 6d.

Both packed in attractive display outers of
12 bottles or 24 sealstrips

**Advertising Campaign
NOW RUNNING**

ALL ENQUIRIES TO
WEST CENTRAL LABORATORIES

**42 THEOBALDS ROAD,
LONDON, W.C.1**

TELEPHONE: HOLborn 2202-3-4. 8986-7



***a palatable liquid
preparation—
containing the principal vitamins
in an orange base***

FORMULA One teaspoonful (3.5 cc) contains:

VITAMIN A	2,500 i.u.	VITAMIN C	10 mg.
VITAMIN B ₁	0.5 mg.	VITAMIN D	375 i.u.

PRICES

	RETAIL	CHEMISTS	WHOLESALE
6 FL. OZ.:	3/9 each	30/- doz.	26/3 doz.
40 FL. OZ.:	24/- each	16/- each	14/- each

The 6 oz. bottle provides daily vitamin-insurance for one whole month.



V I T A M I N S L I M I T E D U P P E R M A L L L O N D O N . W . 6

Chlorophyll—Cuticura

Cuticura—Chlorophyll

For many years past CHLOROPHYLL—nature's own skin healing element—has been skilfully blended with fine medicaments and rich oils in the high quality, super-fatted

CUTICURA SOAPS

CUTICURA OINTMENTS

CUTICURA SHAVING STICKS

This is one of the many important reasons why an ever-growing circle of discriminating people always insist upon these soothing, protective, fragrant Preparations for every-day care of the skin. Display these firm family favourites, and make sure that this steady all-the-year-round repeat business comes to you!



HAND-MADE
HOT WATER BOTTLE

—fabric reinforced and in two colours, red and white. Hard-wearing and reliable. Moulded hot water bottles in slightly smaller size and thickened round seams for added strength—in blue, green and red. Let us send you a trial order.

Lasts for years



**DAVID MOSELEY & SONS LTD., ARDWICK
MANCHESTER 12**

55 NEW BOND STREET, LONDON, W.1.
54 GEORGE ROAD (ISLINGTON ROW), EDGBASTON, BIRMINGHAM 15

MB.3.

SENNA PODS

**HAND PICKED AND SELECTED
ALEXANDRIAN**

ONLY THE FINEST QUALITY OFFERED IN
TAX FREE — COUNTER PACKS
OR IN BULK

SEND FOR SAMPLES AND PRICES

ALGOLOGICAL PRODUCTS CO.
704 OLD KENT ROAD, LONDON, S.E.15



The
wrapped
and
sealed
1/- ROLL
with a
generous
profit
margin

SPICERS

A1 Toilet Tissue

Also in flat packs

SPICERS LIMITED,
UNION STREET, LONDON, S.E.1
Telephone: Waterloo 5871

AMPOULES

Ampouled Injections and Powder Ampoules in large or small quantities. Specialist production under experienced Chemical and Medical supervision.

MARKWELL, EDWARDS & CO. LTD.
12, EAST SMITHFIELD, LONDON, E.1.
Telephone: ROYAL 7456

trickle dose androgen treatment
plus oestrogen and safe sedation

CPL menopax forte tablets
for selective menopausal therapy
available from all wholesalers

CLINICAL PRODUCTS LTD · RICHMOND · SURREY

TANNIC ACID

AND DERIVATIVES

THE BRITISH DYEWOOD COMPANY LIMITED
19 St. VINCENT PLACE, GLASGOW, C 1

✱ AEROMATT

✱ CITRIC ACID

✱ CITRIC ACID ANHYDROUS

✱ PRECIPITATED CALCIUM
CARBONATE

✱ SODIUM POTASSIUM TARTRATE

✱ POTASSIUM BICARBONATE

JOHN & E. STURGE LTD

1 WHEELLEYS ROAD, BIRMINGHAM 15



Cannon Quality and variety help to build your sales !



Cannon research and progress have built up their world-wide prestige. Quality and variety, the keynote of their products; service and co-operation, the basis of their business. For 1953, Cannon have introduced the series of Capitol Bathing Caps, yet another addition to their wide range of quality goods, which will again this year be creating world-wide interest and demand. Now is the time to check your Cannon stocks. All products obtainable from your usual wholesaler.

CANNON RUBBER MANUFACTURERS LIMITED

(Dept. CD11) ASHLEY ROAD, TOTTENHAM, LONDON N17



MODERN Teats and
Soothers

WELLBORN Teats

EASIFLOW Feeders

MODERN Nurser

MODERN Feeder

CAPITOL Range of
BATHING CAPS

DOLPHIN AND
RIPPLE Hot
Water Bottles

NOAH'S ARK and
COTTAGE Series
of Novelty
Hot Water Bottles

CANNON
Multi-purpose
RUBBER MAT

The CANNON
RUBBER BUCKET

AN ALL COTTON WOOL PRODUCT
OF REPUTE

Consolux
Patent No. 410702
(Registered)

**SUPERFINE QUALITY
ALL WOOL SANITARY TOWELS**

**LOOPED ENDS
NON - ABSORBENT BACK**

WHOLESALE ONLY

ROBERT BAILEY & SON, LTD.

SURGICAL DRESSINGS MANUFACTURERS
DYSART STREET, GREAT MOOR, STOCKPORT
Phone: STEPPING HILL 3006/7 Grams: "UNDISPUTED" STOCKPORT

"KWICKDRY" HOUSEHOLD CREPE PAPER TOWELS IN PERFORATED ROLLS FOR THE MODERN HOUSEWIFE

**THEY SAVE WORK
and DRUDGERY and
ARE STRONGER
WHEN WET.**

They serve a multi-
tude of purposes. Of
a soft, pleasing, crepe
texture "KWICK-
DRY" TOWELS are
very absorbent, can
be squeezed like a
cloth yet do not dis-
integrate.

**FOR DRYING HANDS
DRAINING FRIED FOOD
CLEANING POTS & PANS, etc.**

Wire Towel Holders supplied if required

This NEW habit is catching on! Are you cashing in?
Samples and prices from the Paper Specialists:—

FREEDER BROTHERS PAPER MILLS
BRIMSDOWN : ENFIELD : MIDDLESEX

Telephone: HOWard 1847 (5 lines).

'Grams: Sylkocrepe, Enfield





'PYREX'

Regd. Trade Mark

BRAND

*Laboratory and
Scientific Glassware*



AN IMPORTANT ANNOUNCEMENT

FACTORY extensions and increased production facilities have made it possible to reduce the "each" price of most lines of our 'PYREX' Brand Scientific Apparatus. In addition, advantage may now be taken of a generous discount if purchasing in quantities of a dozen or more.

Your normal trade supplier will gladly furnish you with all particulars, together with a copy of our new and more comprehensive Catalogue, on request. Prompt delivery is a special feature of our improved service.

Please note that 'PYREX' Brand Laboratory and Scientific Glassware listed in our Catalogue is made only by James A. Jobling & Co. Ltd., Wear Glass Works, Sunderland, to whom you are asked to write in case of any difficulty of supply.

TWO EXAMPLES OF OUR NEW PRICE RANGE:

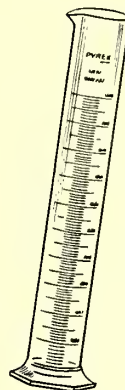
Example 1.



No. 2500. Flat Bottom Flask
250ml. with B24 "GRIP SEAL"
interchangeable ground Socket.
Price each, 6/-; Per doz. 64/10
6 doz. or over, per doz. 60/-

Previous price, each 6/8

Example 2.



No. 3200.
Measuring
Cylinder, 100ml.
Price each, 7/8
Per doz. 82/10
6 doz. or over,
per doz. 76/8

Previous price, each 8/4

Special Apparatus

*We can fabricate glassware to your own design,
made to serve your specific purpose, and we
welcome your enquiries.*



REGD. TRADE MARK

JAMES A. JOBLING & CO. LTD.

Wear Glass Works Sunderland



REGD. TRADE MARK

The original and only makers of 'PYREX' Brand Glass in the United Kingdom.

THESE ARE THE PEAK
MONTHS FOR

bu-to
REGD.

ROSE SCENTED
HAIR REMOVER

★
2/3
PER TUBE

12/- per doz.
+ 75% tax.

and
don't
forget
Biometica's
latest winner

NYCOL
LADDERSTOP

1/3 PER TUBE
8/6 per doz. + 25% tax.

Biggest Ad. Campaign in full swing

QAG

'SURCO'

**SURGICAL ELASTIC
HOSIERY**

SEAMED, SEAMLESS
TWO-WAY STRETCH
ELASTIC NET

**SURGICAL BELTS
TRUSSES AND SUNDRIES**

Over 60 years' service of everything surgical

SURGICAL HOSIERY CO., LTD.
Russell Street, NOTTINGHAM
Telephone No. 75903 Telegrams: Surgical Notts

'Harley' Quality Products

'Harley'

THE
'Harley'
SANITARY
TOILET ROLL

'Harley'
SANITARY
TOILET TISSUE
INTERFOLDED

SELLS AT 10½d.
FOR THE ROLL
AND 9d. FOR
THE FLAT
PACK.

Manufactured by
HAROLD WESLEY
HARLEY MILLS LONDON, N.W.10

May we quote you for——

GLAUBER SALTS B.P.
PEA AND FEATHERY CRYSTALS

EPSOM SALTS B.P.
NEEDLE CRYSTALS, MEDIUM, EXSICCATED.
ALL B.P. GRADES CONFORM TO 1948 STANDARD.
ALSO COMMERCIAL, BATH, & VETERINARY QUALITIES.

HARRIS, HART & Co. Ltd.
GREGGE STREET WORKS
HEYWOOD, LANCs.

TELEGRAMS: HARP. HEYWOOD, LANCs. TELEPHONE: HEYWOOD 6570

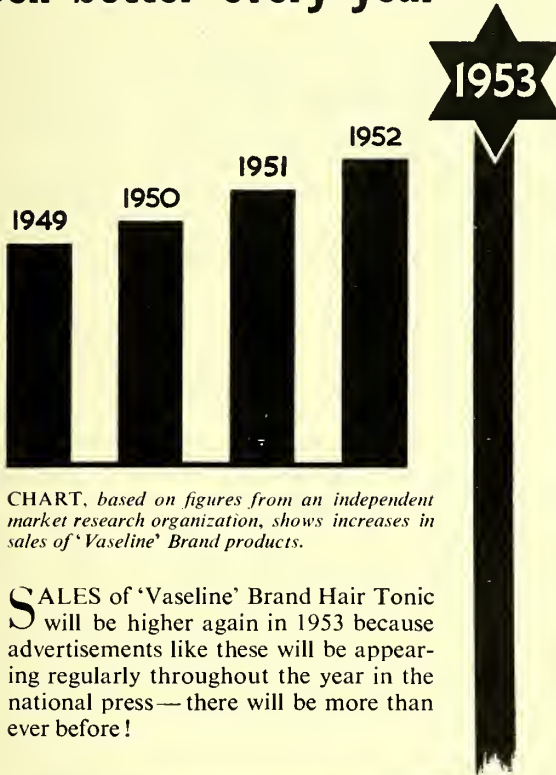
★ LOOK FOR THE RED CORE

GUMSTRIP REGD
SEALING TAPE
IN ALL WIDTHS — BROWN & COLOURS

★ Send for the Sample Folder
SAMUEL JONES & CO., LTD.
NEW BRIDGE STREET, LONDON, E.C.4. CENTRAL: 6500

BUTTERFLY BRAND
Best in the World

'Vaseline' Brand Products sell better every year



CHART, based on figures from an independent market research organization, shows increases in sales of 'Vaseline' Brand products.

SALES of 'Vaseline' Brand Hair Tonic will be higher again in 1953 because advertisements like these will be appearing regularly throughout the year in the national press — there will be more than ever before!

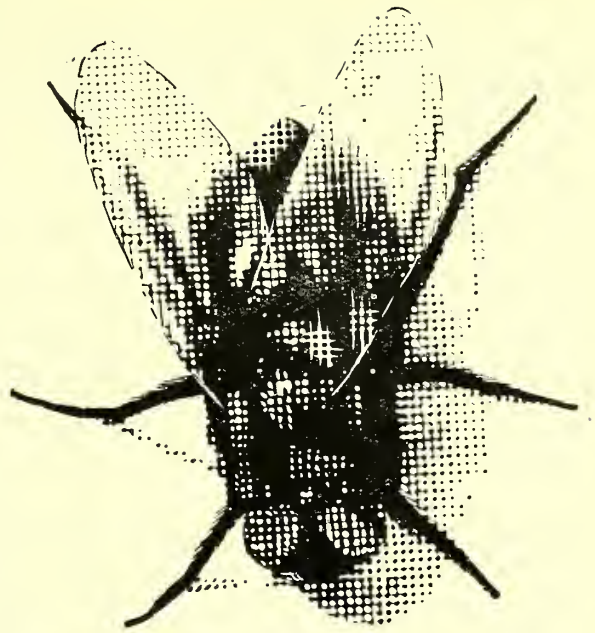


Chesebrough Mfg. Co. Ltd.

VICTORIA ROAD, N.W.10

MAKERS OF 'VASELINE' BRAND PRODUCTS

**KEEP UP YOUR STOCKS
ALL THE YEAR ROUND**



BIG

**national
advertising
is SELLING**

this **little** product
to  thousands!

Our Sales Records are all being broken. Get your share of the BIG PROFIT MARGIN from this little product. It's ideal for the home; neat, delicately perfumed, immediately lethal to flies and moths. Smart display outer carries 3 dozen! Retails at 6d.



DDT **FLYPAK**
THE NEW NEATER PRODUCT THAT
kills flies cleanly!

Write for terms to sole distributors:
DALMAS LTD.

Junior Street,
LEICESTER

and

140/142 St. John Street,
LONDON, E.C.1

HALF PRICE !!

Generous Introductory Offer to all chemists!

Evan Williams

**introduce their new line
A LIQUID SHAMPOO WITH LANOLIN**

To retail at **6^D**



If you have not received
full particulars write
to us now.

With your order for 3 Dozen 6d Sachets
(costing 10/6 plus P.T.) we will send you
an extra 3 dozen. **AS A FREE GIFT.**

EVAN WILLIAMS CO. LTD. (Sales Dept.) Aintree Road, Perivale, Middlesex

RE-INTRODUCING ILON ABSCESS SALVE ►

Ilon Abscess Salve has been found an infallible remedy for the treatment and elimination of Boils, Carbuncles and Abscesses. Rapid and painless in its action—Four applications being normally sufficient.

ILODERM—manufactured by the same Company is excellent in the treatment of Burns, Dermatitis and most other Skin Ailments.

There is no penicillin or other Anti-Biotic in any of the ILON products.

Concessionaire — T. V. Duncan, 181 Blairbeth Road, Burnside, Lanarkshire, Scotland.



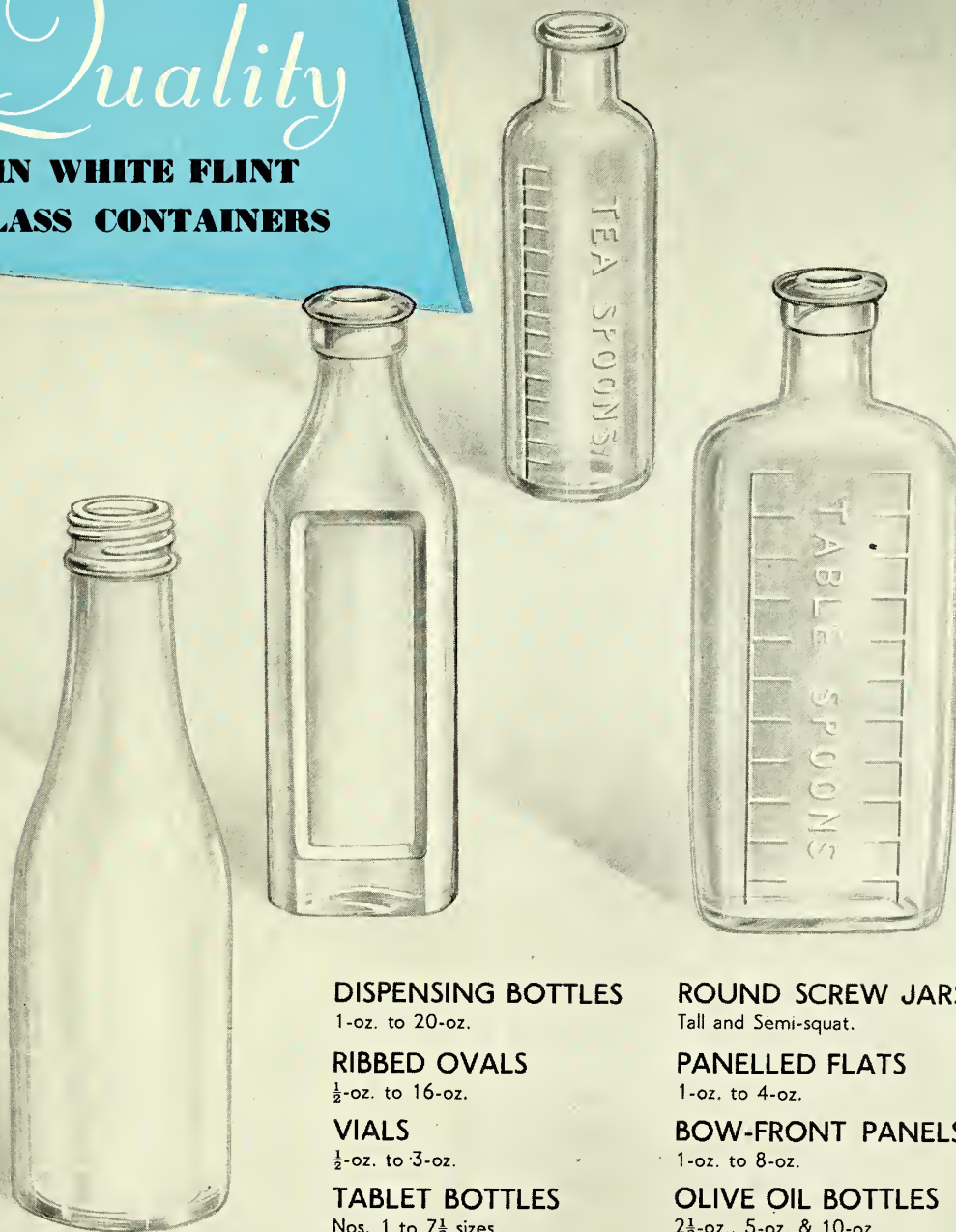
**ILON
ABSCESS SALVE**
TUBE WITH ABOUT 20 GRAMMES

Principal Distributors:—NEW APOTHECARIES CO., LTD., 59 GLASSFORD STREET, GLASGOW, (C.I.).
ILON CHEMISCHE INDUSTRIE, FREIBURGH, GERMANY



Quality

**IN WHITE FLINT
GLASS CONTAINERS**



DISPENSING BOTTLES

1-oz. to 20-oz.

RIBBED OVALS

$\frac{1}{2}$ -oz. to 16-oz.

VIALS

$\frac{1}{2}$ -oz. to 3-oz.

TABLET BOTTLES

Nos. 1 to 7 $\frac{1}{2}$ sizes.

ROUND SCREW JARS

Tall and Semi-squat.

PANELLED FLATS

1-oz. to 4-oz.

BOW-FRONT PANELS

1-oz. to 8-oz.

OLIVE OIL BOTTLES

2 $\frac{1}{2}$ -oz., 5-oz. & 10-oz.

WHOLESALE ONLY

- Prompt delivery from stock
- Packed in easily handled cartons



**NATIONAL GLASS
WORKS (YORK) LTD.**

FISHERGATE, YORK. Tel. YORK 3021.
ALSO AT: 105 HATTON GARDEN, LONDON, E.C.1.
TEL. HOLBORN 2146

GREATEST EVER SELLING CAMPAIGN FOR

*Lovely
Lovely
Lavender*

IN JUNE, FIELD'S, makers of Lavender fragrance products since 1642 will launch their new Buckingham Lavender range with the biggest advertising campaign ever devoted to a single fragrance range. Full colour pages will appear in Picture Post and all the leading women's magazines. A half-page in the Sunday Express and many other large space press advertisements will continue the campaign right through to Christmas.

THIS colossal campaign is justified by the strength and quality of the fragrance and the exceptionally attractive packages.

LAVENDER is always popular. We believe Field's Buckingham Lavender is unsurpassed in strength and quality. Please link up your counter and window displays with this tremendous campaign by using the specially designed display material.

Field's BUCKINGHAM

J. C. & J. FIELD LTD.

CHURCH STREET, AMERSHAM, BUCKS



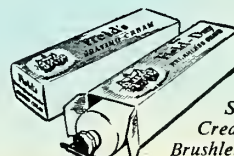
Shaving
Bowl 4/6



Brushless
Shave 3/-



Solid
Brilliantine 2/6



Shaving
Cream 2/-
Brushless Shave 2/-



Brilliantine 2/-



<i>Lavender Soap</i>	10d
<i>Lavender Talc</i>	2/6
<i>Two Shampoos</i>	7d
<i>Six Bath Cubes</i>	2/9

Lavender

162, NEW BOND STREET, LONDON W.1



Lavender
Shampoo 7d.



Bath
Cubes 5½d each

After
Shave 2/6



IN HANDY TINS FOR BULK USERS

JEYPINE has outstanding germicidal power* combined with fragrance and freshness. Economical in use, it is the ideal disinfectant, particularly for offices, factories, hospitals, cinemas, theatres, public buildings, etc.

For such users, JEYPINE is available in attractive and convenient sized tins which are designed to open and close easily, pour cleanly and prevent waste from spilling. * 5 Times stronger than carbolic acid, yet gentle as soap.

QUART SIZE, PER DOZEN	
WHOLESALE 45/-	RETAIL 5/- EACH
GALLON SIZE, EACH	
WHOLESALE 11/3	RETAIL 15/- EACH
<i>less the usual generous Jeyes' discounts</i>	

A MOST PROFITABLE ADDITION
TO YOUR TURNOVER

ORDER NOW!

JL JES' SANITARY COMPOUNDS COMPANY LTD., Millbrook, Manor Road, Chigwell, Essex

CORK LINED SLEEVES

CORRUGATED PULL-THROUGH BOXES

Compressed Paper Packing Limited
Horton Road - West Drayton - Middlesex

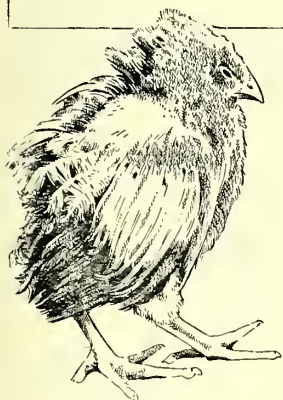
Telephone: WEST DRAYTON 2237

BRITISH RESEARCH APPROVES

NEFCO

(REGD. TRADE MARK)

**for mixing with the feed
in the control of coccidiosis**



In an authoritative article* published recently Animal Health Trust research workers testified to the effectiveness of 'Nefco'.

- 'Nefco' controls coccidiosis outbreaks effectively.
- 'Nefco' is of value as a preventive on farms where there is a history of coccidiosis.
- 'Nefco' permits development of lifelong immunity.
- 'Nefco' treated chicks show normal weight gain.

* *British Veterinary Journal*, February 1952



'Nefco' is issued in the form of a premix which is simply incorporated in the mash.

'Nefco' is not a poison and may be sold without restriction.

Get your stock of 'Nefco' now — prices are as follows:

Small size 3½-oz. approx.	trade price 23/- doz.
retail price 2/10½ each, including tax	
Large size 14-oz. approx.	trade price 78/6 doz.
retail price 9/10 each, including tax	
Bulk pack 5 lb.	trade price 30/- each
retail price 45/- each, including tax	

Stocks, literature, and showcards available from

A. J. WHITE, LIMITED, COLDHARBOUR LANE, LONDON, S.E.5

NCWT 42



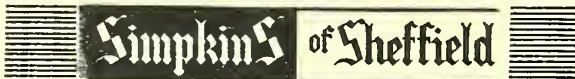


MEMBERS OF
THE 1953 BRITISH
MOUNT EVEREST
EXPEDITION
CARRIED

SIMPKINS
VITA-GLUCOSE The Original
Glucose Tablets

ALSO USED BY TOP-RANKING COMPETITORS
IN EVERY SPORT FOR INSTANT ENERGY

Now available in four flavours; Standard (Lemon), Lime, Orange or Strawberry



Q4

Be sure of satisfaction



sell only
GENUINE

A real Lastonet surgical stocking is finer and cooler and does, of course, fit perfectly. It is also invisible under ordinary stockings and stretches equally in all directions to afford full, even support. See you have a supply of Lastonet self-measurement forms.

Lastonet
the original elastic net stocking
ALWAYS MADE TO MEASURE
the stocking with six months' guarantee

LASTONET PRODUCTS LTD · CARN BREA · REDRUTH · CORNWALL

THE FINEST FILTER PAPERS FOR
THE MANUFACTURING CHEMIST

633
POSTLIP MILLS
UUU

EVANS, ADLARD & CO. LTD.
WINCHCOMBE GLOS.
Makers of Industrial Filterings and Absorbent Base Paper
Enquiries and orders for "Postlip" Papers should be addressed to our Sales Representatives:- TECHNICAL PAPER
SALES LTD. 9 BRIDEWELL PLACE, LONDON, E.C.4

DISPLAY AND RECOMMEND
SECTO D.D.T.
BRITAIN'S BEST-AND FOR PROFIT
Cupal Limited, Blackburn, Lancs.

DICTIONARY OF SYNONYMS
For the pharmacist and his staff.
Contains over 7,000 synonymous terms.
5/4 POST FREE
The Chemist and Druggist
28 ESSEX STREET, LONDON, W.C.2

HERE'S the STING

Why is Calsol Milk a best seller? because it doesn't solidify, doesn't separate—keeps its satin-smooth creaminess on the beach, in the home—and on your shelves!

HERE'S the THING

CALSOL MILK made by **JEFFREYS MILLER & COMPANY LIMITED.**
LEYLAND MILLS WIGAN



A NEW AND SAFE LAXATIVE
FOR USE IN
OBSTETRICS and GYNÆCOLOGY

Senokot

CHOCOLATE LAXATIVE GRANULES

"The preparation was given as the routine aperient to 100 puerperal women . . . Compared with castor oil . . . senokot proved preferable. Many of the patients given castor oil had relative constipation afterwards, whereas with senokot normal bowel habit was more quickly resumed. The patients themselves found the senna more acceptable." *The Lancet, 21st March 1953*

*SENOKOT is not advertised to the public, has no official equivalent and may be prescribed under the N.H.S.
Literature and sample on request.*



WESTMINSTER LABORATORIES LTD., CHALCOT ROAD, LONDON, N.W.1

ATTENTION ALL PHARMACISTS

P.A.T.A.

PYOREX BAILLY

MEDICATED DENTIFRICE

Is being energetically introduced to the Dental Profession by :

- ★ DIRECT MAIL
- ★ TRI - MONTHLY PRESS INSERTIONS
- ★ PERSONAL REPRESENTATION
- ★ SAMPLING

Demand is growing due to approval and recommendation by Dentists.

YOUR PROFIT over 40%
Price to you 20/8 doz. plus 5/0½ P.T.
RETAIL PRICE 2/10 per tube

We would appreciate your support in its distribution

A New Treatment of Angina of Effort BENTONYL

An ever increasing demand is being created by constant Medical propaganda. We therefore seek your co-operation in its distribution.

Obtainable through your wholesale house or direct from ourselves.

PRICE TO YOU—
Tube of 50 Pills 39/9 dozen plus P. Tax.
Dispensing Pack, 250 Pills 17/6 Net.

RETAILING AT—
Tube of 50 Pills 5 3

BENGUE & CO., LTD.

Manufacturing Chemists, MOUNT PLEASANT, ALPERTON, WEMBLEY, MIDDLESEX

Every DANDRUFF SUFFERER is a customer for

Gill's DANDRUFF REMOVER SHAMPOO

Gill's definitely removes dandruff at the first application. Word of mouth recommendation alone is bringing ever increasing sales throughout the U.K.—it's a first-class product selling at a reasonable price and showing generous profit to the retailer. You can recommend Gill's with the utmost confidence, and it's suitable for children as well as adults. If you would like to try it yourself, write on business heading for a Free Sample. Fully descriptive literature with extracts from many hundreds of unsolicited testimonials gladly forwarded on request.

Available from all good wholesalers at 16/8 dozen, to retail at 2/6 per bottle. Or direct—carriage paid on 3 dozen. Display material supplied.

★ Gill's Dandruff Remover Shampoo is also made and distributed in Belgium, Eire, France, Denmark, Sweden, Holland, Switzerland, Italy, Spain, Portugal and Turkey.



BEAUTISALES LTD. 35 Old Bond Street, London, W.1 Telephone **REGEN 2565-6**

New WALT DISNEY Design DDT FLY CARDS SQUARE & CUT OUTS

Sample & prices on application to :-
THE COUNTY PAPER MILLS
72 TOTTENHAM COURT ROAD,
LONDON, W.1

MUSeum 0655

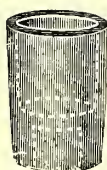
For an unusually efficient service in the supply of all Patents, Ethical Proprietaries, Drugs, Galenicals and sundries.

We deliver regularly to pharmacists in South Yorkshire, Nottinghamshire and Derbyshire.

SMITH & HILL
(CHEMISTS) LTD.
SIDNEY ST., SHEFFIELD, 1.
Telephone : 28383 (5 lines)

THE 'CLINBRITIC' VACCINE BOTTLE

Patent No. 492200



Assembly Details



IN ALKALI FREE
AMBER OR WHITE
GLASS



Completed

The following description is taken from WAR MEMORANDUM
No. 15, MEDICAL RESEARCH COUNCIL

"A very satisfactory pattern of vaccine bottle, which is rapidly coming into general use, is that described by Berry (1938). The skirted rubber vaccine cap, which closes the bottle, is protected by an outer Bakelite screw cap containing an absorbent pad which can be impregnated with a 10 per cent. solution of chloroxylenol B.P. Provided that the pad is kept well wetted with the solution of chloroxylenol, the skirted rubber cap beneath it will remain always sterile, and will require no further treatment before puncturing."

FULL DETAILS AND SAMPLES FROM:—

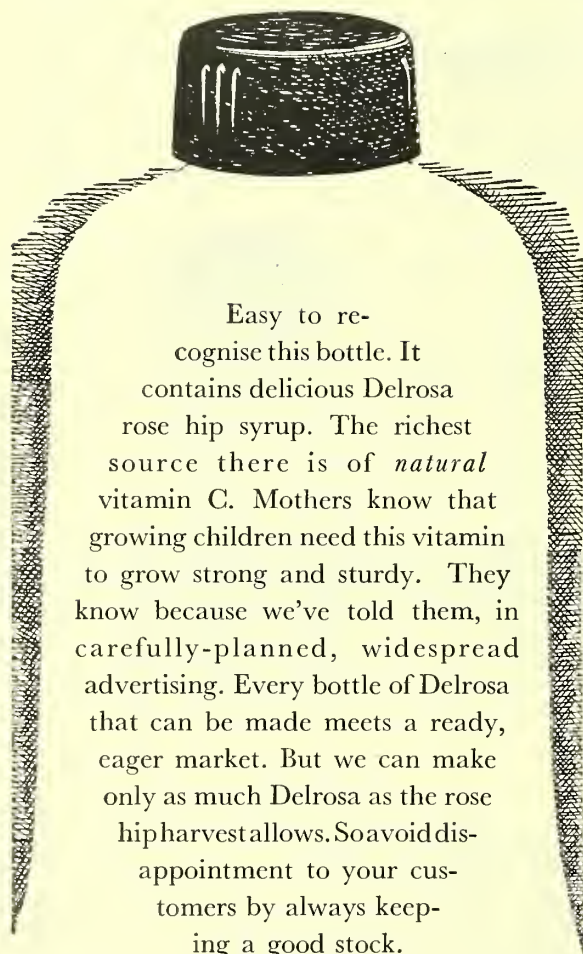
BRITTON MALCOLM & CO. Ltd

38 · SOUTHWARK BRIDGE  ROAD · LONDON · S · E · 1

WAT 4874/6

D E P E N D A B L E

The shape of something in demand



Delrosa is distributed through Chemists only.

Delrosa

ROSE HIP SYRUP



DA27/a9/52

SCOTT & TURNER, ANDREWS HOUSE, NEWCASTLE-ON-TYNE

There's a Customer born every minute



Make sure of your share of this lucrative BUSINESS

REMEMBER the **FEEDRITE** Anti-colic teat will not go flat as baby sucks A selling point well worth remembering when making one of those many sales which are boosting trade everywhere.

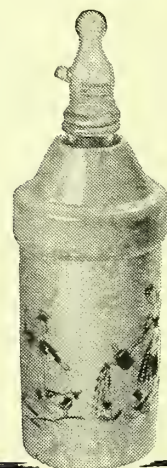
Every minute, every day, we are supporting you by forceful, hard-hitting advertising with a nation-wide readership of over 22,000,000 readers.

Display our showcards and get your share of this business.

FEEDRITE

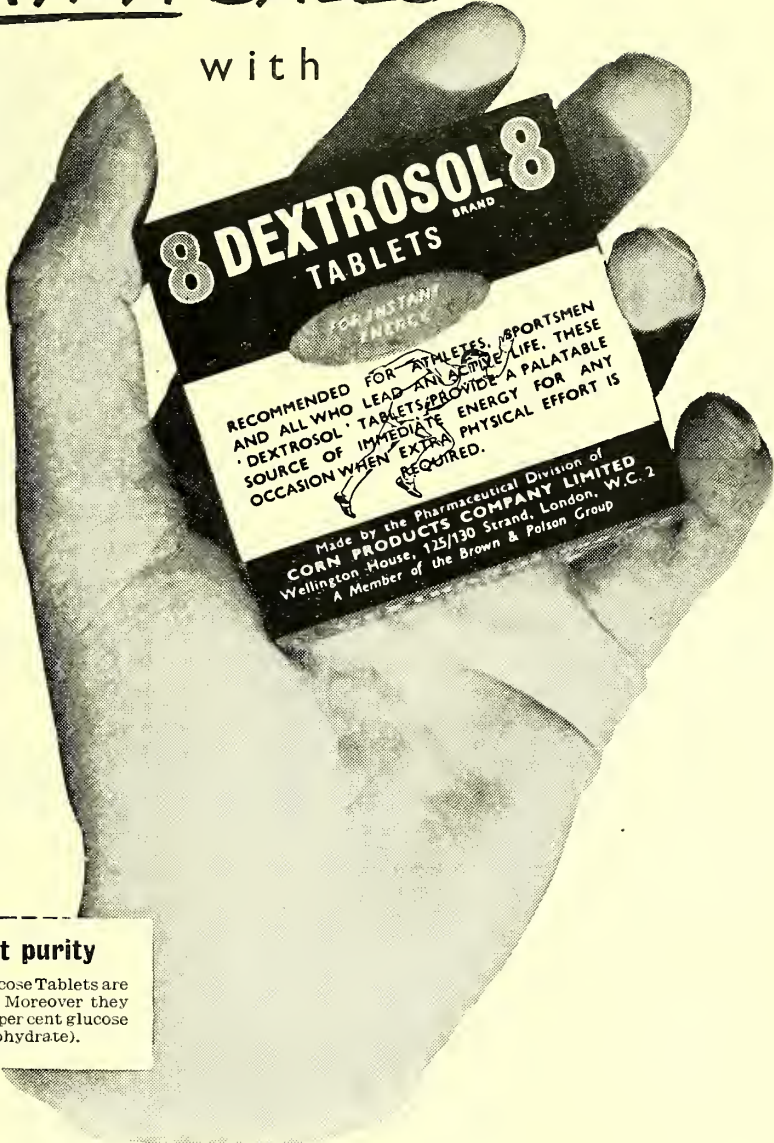
LTD

300, KINGSTON ROAD,
MERTON PARK, LONDON, S.W.20
LIBerty 3443/4



SECURE EXTRA SALES

with



for instant energy

Delicately flavoured, 'Dextrosol' Glucose Tablets are a source of *immediate* energy—which gives them an *immediate* appeal to everyone!

for perfect purity

'Dextrosol' Glucose Tablets are perfectly pure. Moreover they contain over 98 per cent glucose (Dextrose Monohydrate).

for speedy sales

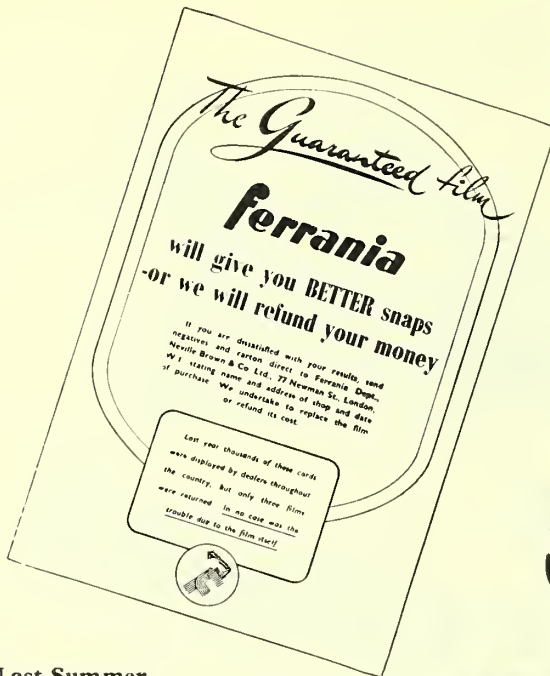
In test areas 'Dextrosol' Glucose Tablets have *proved* themselves to be really quick-selling. No sooner seen than sold! And remember, 'Dextrosol' Tablets are an *entirely new line*.

for extra profit—On every 10½d packet of 'Dextrosol' Glucose Tablets you make at least

33⅓%
PROFIT

ORDER 'DEXTROSOL' GLUCOSE TABLETS NOW through your usual channels

DEXTROSOL GLUCOSE PRODUCTS
BRAND



the guaranteed film ferrania

Last Summer, we broke new ground by definitely guaranteeing every Ferrania film. Thousands of showcards were displayed by dealers throughout the season yet only 3 films were returned. These were gladly replaced, even though no faults were found in the film itself. This year a new and more attractive colour showcard is available.

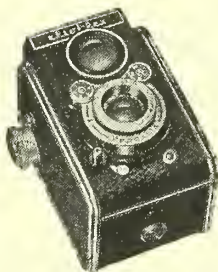


IN this Coronation year, more photographs will be taken than ever before. To capture an even greater share of the market, we are advertising Ferrania film in the photographic press, and in the "Personal" columns of more than fifty National Newspapers, magazines and "hobby" publications with a combined readership of many millions.

Tie up with this bigger-than-ever campaign by window and counter display: we will send you a wide range of colourful sales aids in any reasonable quantity. These include dummy cartons from actual size, up to 20"; cut-out Ferrania figures in 5 sizes; showcards; photogravure folders; stickers and posters; poster stamps; technical data leaflets.

You can do big business with the only **guaranteed** film.

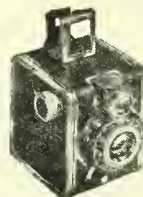
● FERRANIA QUALITY CAMERAS



ELIOFLEX
£11 - 18 - 6



ASTOR £29 - 17 - 6



RONDINE £5 - 8 - 8



IBIS £3 - 15 - 0

NEVILLE BROWN & COMPANY LTD

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57/23



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